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# CURRICULUM VITAE OF VINCENZO PIURI

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May 2025

## 1 Contact Information

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## 2 Education

- Ph.D. degree in Electronic Engineering of Information and Systems, Nov. 1985 – Nov. 1988, Politecnico di Milano, Italy; thesis: “Fault tolerance techniques for arithmetic array processors”
- M.S. degree (with honors) in Electronic Engineering, Nov. 1979 – July 1984, Politecnico di Milano, Italy; awarded with the 1984 IEEE Student Award

## 3 Positions

- March 2022 - present: Chair of the Educational Council (Consiglio di Coordinamento Didattico) of the Master Degree Program in Artificial Intelligence for Science and Technology, Consortium of Università degli Studi di Milano, Università degli Studi di Milano-Bicocca and Università di Pavia, Italy
- Oct. 2000 - present: Full Professor in Computer Engineering, Università degli Studi di Milano, Italy (position won in 1999)
- Aug. 2012, Aug. 2013, Aug. 2014, Aug. 2015, Aug. 2016, Aug. 2017, Aug. 2018, Jan. 2019, Aug. 2019: Visiting Researcher, George Mason University, Fairfax, VA, USA
- Oct. 2007 - May 2012: Chair of the Department of Information Technology, Università degli Studi di Milano, Crema, Italy
- Nov. 2005 - Sep. 2007: Chair of the Ph.D. Degree Program in Computer Science, Università degli Studi di Milano, Italy
- Summers 1996-99: Visiting Associate Professor, University of Texas at Austin, Austin, TX, USA
- Nov. 1992 - Sep. 2000: Associate Professor of Computer Engineering, Politecnico di Milano, Italy (position won in 1991)
- Nov. 1988 - Oct. 1992: Director of the Computer Center, Department of Electronics and Information, Politecnico di Milano, Italy

## 4 Research

The research activity has been carried out in the field of information processing technology and systems, with reference to distributed, massively-parallel and adaptive approaches, from the points of view of hardware, computational paradigms, and intensive-computing applications. In particular, the following areas have been addressed.

- *Artificial intelligence techniques and architectures*  
Theoretical and architectural aspects have been studied for implementing optimized solutions, mainly for artificial neural networks. Theoretical research has been focused on deep learning networks, learning (in particular, online learning, transfer learning, adversarial machine learning), and hierarchical structures (mainly for Radial basis Functions and Support Vector Machines). Research on architectures has studied high-performance solutions and fault-tolerant structures for neural networks, as well as design methodologies for embedded composite systems.
- *Artificial intelligence applications*  
The use of computational intelligence techniques have been deeply studied in a variety of application areas, both for testing the effectiveness of innovative theoretical concepts and to derive application needs as challenges for theoretical research leading also to innovation in the applications. This research specifically refers to identification, prediction, control, signal, and image processing applications. Advanced industrial applications have been realized for manufacturing process and environmental monitoring, quality certification, and biomedical analysis.
- *Biometrics techniques and systems*  
Biometrics technologies and systems, including multi-modal approaches, have been studied for person verification, identification and recognition as well as for behavioral analysis, with specific reference to security applications. Artificial intelligence has been used to support flexible approaches capable of learning from data. Biometric technologies and systems have been evaluated from different points of view to support a comprehensive design methodology. Privacy issues in biometrics have been analyzed. Main focus has been on fingerprint, palprint, iris, soft biometrics, and less-constrained and contactless techniques.
- *Distributed and parallel information processing architectures*  
Cloud, fog, and edge computing and Internet-of-Things has been studied to support advanced intelligent applications, in particular in the Industry 4.0 framework. Cloud computing has been studied for user requirements specification. Modeling approaches have been studied for concurrent processes and communications in distributed and multiprocessor systems. Methodologies have been defined for evaluating process parallelism and system dimensioning, including fault tolerance capacity. The virtual FPGA management and an innovative agent-based distributed file system have been proposed.
- *Arithmetic units*  
Algorithmic and structural characteristics of arithmetic units and systems have been studied. New architectural solutions have been defined, with specific reference to high computational performance, high modularity, regularity of the integrated implementation, and fault tolerance by using codes.
- *Fault-tolerant architectures*  
Techniques and design methodologies have been studied for information processing systems with high performance and fault tolerance characteristics. In particular, innovative solutions have been proposed for Cloud Computing architectures, array processors, and digital systems for signal and image processing applications.

Researches performed in these areas are strictly related since they focus on advanced performances and characteristics, even if they consider different abstraction levels. The main goals have been the development of highly adaptive functionalities and systems, the definition of structures and computational approaches having high computational performance, and the definition of advanced fault-tolerance capabilities. Studies and implementations have been carried out with the purpose of integrating the theoretical analysis with the definition of methodologies and tools to achieve practical results efficiently.

These researches have been carried out within national and international projects, in cooperation with Italian universities (University of Bologna, Brescia, Cagliari, Catania, Genova, Messina, Modena, Pavia, Padova, Salerno, Trento, Udine; Politecnico di Bari, Politecnico di Torino), foreign universities (Austin - TX-USA, Berkeley - CA-USA, Boulder - CO-USA, Erlangen - Germany, George Mason University - VA-USA, Karlsruhe - Germany, Massey - New Zealand, Minsk - Belarus, Northeastern University - USA, Novi Sad - Serbia, Purdue University - USA, Singapore, Universidad Rey Juan Carlos - Spain, Wuyi University - China), research centers (Academy of the Sciences of the Belarus - Belarus, Academy of the Sciences of the URSS - Moscow-URSS, ASI - Ital-

ian Space Agency, CNR - Istituto di Elettronica e di Ingegneria dell'Informazione e delle Telecomunicazioni - Sezione di Milano, CNR - Istituto di studi sui sistemi intelligenti per l'automazione, Consorzio Crema Ricerche, Consorzio Padova Ricerche, CSELT, IRST-Trento, CERN-Switzerland, European Centre for Soft Computing - Spain, Laser Zentrum Hannover - Germany), and industries (Centro Ricerche FIAT, Edison, ENEL, Gilardoni, Hewlett-Packard, IBM, Italtel S.I.T., Philips, Selenia, STMicroelectronics, Tecnogamma, Trumpf, Alenia Spazio, Laben, Planetek Italia, Space Software Italia, Quadrics Supercomputers World, Space DAT, IMAL, Dermalog Identification Systems, Indra Sistemas, Safe-ID solutions, SAIB, Vision-box).

Main research projects: EU EdgeAI, EU Glaciation, EU ABC4EU, EU I-PAN, EU MARSAL, EU MOSAICrOWN, EU ESCUDO-CLOUD, EU PrimeLife, EU PRIME, EU COST IntelliCIS, ASI COSMO-SkyMed, ASI GUTTER, EU IMS-BRITE SLAPS, EU CRAFT TRACKS, EU META, CERN FERMI, EU Esprit PATRICIA, EU Esprit ARTS-IP, EU CVT CAD VLSI for Telecommunications, MURST-MPI projects - Italian Ministry of Higher Education and Research, CNR Progetto Finalizzato MADESS II, CNR Progetto Finalizzato MADESS, CNR Piano Nazionale Microelettronica, CNR Progetto Finalizzato Informatica.

## 5 Teaching

### *Undergraduate and graduate courses*

- Undergraduate courses at Università degli Studi di Milano, Italy: Operating Systems I (6 ECTS; academic years 2010/11 - 2018/19; online edition: academic years 2010/11 - 2023/24), Operating Systems II (6 ECTS; academic years 2010/11 - 2018/19; online edition: academic years 2010/11 - 2023/24), Operating Systems (12 ECTS; academic years 2003/04 - 2009/10 and 2019/20 - 2023/24; online edition: academic years 2005/06 - 2009/10), Dependable Systems (6 ECTS; academic year 2006/07), Neural Networks - for biotechnology (5 ECTS; academic years 2000/01 - 2004/05), Foundations of Computer Science (6 ECTS; academic years 2000/01 - 2002/03), Algorithms and Data Structures (5 ECTS; academic years 2000/01 - 2002/03)
- Undergraduate courses at Politecnico di Milano, Italy: Information Processing Systems (7.5 ECTS; 2002/03 - 2007/08), Operating Systems 1 (1 semester; academic year 1993/94; 2 editions given in the academic years 1994/95 - 1999/00), Operating Systems 1 (1 semester; 1993/94, 2 editions: 1994/95 - 1999/00), Operating Systems 2 (1 semester; academic years 1993/94 - 1994/95; 2 editions given in the academic years 1995/96 - 1999/00), Operating Systems (2 semesters; academic year 1993/94), Foundations of Computer Science (2 semesters; academic year 1992/93), Laboratory of Electrotechnics and Applied Electronics (2 semesters; academic year 1992/93)
- Graduate courses at Università degli Studi di Milano, Italy: Artificial Intelligence (6 ECTS; academic years 2019/20 - 2022/23), Intelligent Systems (6 ECTS; academic years 2009/10 - 2011/12, 2013/14 - 2018/19), Intelligent Systems for Monitoring and Control (6 ECTS; academic year 2011/12 - 2013/14), Neural Networks (5 ECTS; academic years 2000/01 - 2008/09; available also to undergraduate students)
- Graduate courses in the Joint M.S. Degree Program in Artificial Intelligence for Science and Technology, co-organized by Università degli Studi di Milano, Università degli Studi di Milano-Bicocca and Università degli Studi di Pavia, Italy: Advanced Foundations of Artificial Intelligence - Module 1 “Artificial Intelligence” (6 ECTS; academic years 2022/23 - 2023/24)

### *International M.S. programs*

- International Master’s Degree Program on Soft Computing for Industrial Applications, Università degli Studi di Milano, Italy: Implementations of soft computing (1 ECTS), Soft Computing for Measurement and Monitoring Systems (1 ECTS), Soft Computing for Web Applications (1 ECTS), Laboratory of Soft Computing 1 (4 ECTS), Laboratory of Soft Computing 2 (4 ECTS); (2004/05)
- Joint M.S. Degree Program in Software Engineering, Politecnico di Milano, Italy - University of Illinois at Chicago, USA: Networked Operating Systems (2 semesters; 1999/00 - 2001/02)

### *Specialization school for teaching in secondary educational programs*

- Scuola di Specializzazione per l’Insegnamento Secondario SILSIS, Milan, Italy: Laboratory of Operating Systems (1999/00 - 2008/09), Laboratory of Management of Computer Laboratories (2000/01 - 2008/09)

### *Ph.D. programs*

- Artificial Intelligence Techniques, Applications, and Social Issues, Università degli Studi di Milano, Italy, coordinator of the international course, offered within the 4EU+ Alliance: 20 hours (2021)
- Soft computing for industrial applications, Università degli Studi di Milano, Italy, course: 10 hours + 30 hours for research project (2004)
- Fault Tolerant Arithmetic, University of Texas at Austin, TX, USA, course: 40 hours, open also to M.S. degree students (1996-99)
- Fault tolerance techniques in arithmetic circuits, Politecnico di Milano, Italy, course: 20 hours (1997)
- Fault tolerant arithmetic units, Università degli Studi di Genova, Italy, seminars (1995-98)

### *Summer/Winter schools for Ph.D. students*

- The European Network for Cybersecurity (NeCS 2024) PhD School, Cortina D’Ampezzo, Italy, January 8-12, 2024: Biometrics: Technologies, Challenges and Research Directions (1 hour)
- International Summer School on Embodied Technologies for Human-Machine Interaction and Medical Applications, Tunis, Tunisia, September 5-9, 2023: Artificial Intelligence for Medical Data Analysis and Decision Support (1 hour)
- IEEE International Measurement University (IMU 2009), Povo, Italy, July 20-24, 2009: Virtual Instruments and Distributed Instruments (4 hours)

- NATO-IEEE-INNS-ENNS Advanced Study Institute on Neural Networks for Instrumentation, Measurement, and Related Industrial Applications (NIMIA 2001), Crema, Italy, October 9-20, 2001: Implementations of Soft Computing (8 hours), Soft Computing for measurement and monitoring systems (8 hours)

#### *Steering Committee of Summer Schools*

- IEEE International School on Imaging (since 2013, member)

#### *Courses for international scientific associations*

- IEEE E-Learning Library (formerly IEEE Expert Now Program), continuous education program: Implementations of Computational Intelligence Techniques, in cooperation with Fabio Scotti (2007)

#### *Ph.D. supervision*

- Mulualem Bitew Anley, “Robust DDOS Attack Detection with Artificial Intelligence”, National Ph.D. Degree Program in Cybersecurity, Università degli Studi di Milano, expected graduation in 2025 (co-supervisor)
- Svetlana Romanchova, “Resource Allocation in Cloud Infrastructures”, Ph.D. Degree Program in Information Technology, L.N. Gumilyon Eurasian National University, Astana, Kazakhstan, expected graduation in 2025 (co-supervisor)
- Mohanad Abukmeil, “Explainable Neural Networks”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2022
- Abhinav Anand, “Biometric Technologies for Ambient Intelligence”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2018
- Gerson Antunes Soares, “Context-aware Dependability in Cloud Computing”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2017
- Aleksandar Rikalovic, “GSI-based Data Mining Production Site Selection”, Ph.D. Degree Program in Information Technology, University of Novi Sad, Serbia, 2014
- Angelo Genovese, “Less-Constrained Tri-Dimensional Biometrics: the Palmprint”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2014
- Ravi Jhawar, “Dependability in Cloud Computing”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2014
- Terez Varkonyi, “New Adaptive Methods for Robust Fixed Point Transformations-based Control of Non-linear Systems”, Dual Ph.D. Degree’s Program in Computer Science of the Obuda University and the Università degli Studi di Milano (Ph.D. Degree in Applied Informatics of the Obuda University and the Ph.D. Degree in Information Technology of the Università degli Studi di Milano), 2013 (co-supervisor)
- Ruggero Donida Labati, “Contactless Fingerprint Biometrics: Acquisition, Processing, and Privacy Protection”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2013
- Alberto Amato, “Semantic Analysis and Understanding of Human Behaviour in Video Streaming”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2011
- Francesco Bellocchio, “Online Hierarchical Models for Surface Reconstruction”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2011
- Marco Calabrese, “Hierarchical-Granularity Holonic Modelling”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2011
- Vladimir Novakovic, “Mobile Agents for a Distributed File System”, Ph.D. Degree Program in Information Technology, Università degli Studi di Milano, 2004
- Fabio Scotti, “Designing Methodologies for Composite Systems”, Ph.D. Degree Program in Information and Automation Engineering, Politecnico di Milano, 2003 (co-supervisor)
- Stefano Ferrari, “A Hierarchical Methodology for the Analysis and the Synthesis of Tri-Dimensional Images”, Ph.D. Degree Program in Information and Automation Engineering, Politecnico di Milano, 2001

#### *Ph.D. referee/external examiner*

- Guru Nanak Dev University, Amritsar, India (2019-2020)
- Visvesvaraya Technological University, Karnataka, India (2018-2023)
- Anna University, Chennai, India (2020-2023)
- Shahaeed Zulfikar Ali Bhutto Institute of Science and Technology, Karachi, Pakistan (2018-2019)
- Avinashilingam Institute for Home Science and Higher Education for Women, Tamil Nadu, India (2018)
- G.B.Technical University, Lucknow, India (2014)
- ABV - Indian Institute of Inf. Technology and Management, Gwalior, Madhya Pradesh, India (2013)

- Nanyang Technological University, Singapore (2005, 2006, 2012)

*Support activities for educational programs*

- In the research project CEE ESPRIT META, he cooperated to the specification of a distributed, multimedia, hypertext system for education in local and geographic environments (1994-1996).
- In an internal project of the Department of Electrotechnics and the M.E.T.I.D. Center, Politecnico di Milano, Italy, he studied the use of distributed systems supporting educational activities by means of hypertext technology, directed to implement distributed, virtual educational environments and the related development environments (1997-2000). The experimental case was the virtual educational laboratory for the course of electrical measurements at Politecnico di Milano, Italy, which is still used at the Department of Electrotechnics, Politecnico di Milano, Italy, and, remotely, in the electrical measurement laboratories at Politecnico di Torino and at Università of Padova, Italy.

*Teaching activities before the appointment as professor*

- Cooperation in the management of the Microcomputer and Microelectronics Laboratory at the Department of Electronics and Information, Politecnico di Milano, Italy (1984-1992), supervising training projects and M.S. research in distributed systems, massively-parallel processing architectures, arithmetic units, neural networks, CAD tools for VLSI design, also in cooperation with companies (Italtel, Philips, Selenia, SGS-Thompson, Telettra)
- Seminars in undergraduate and graduate courses at Politecnico di Milano (1984-1992), on electrotechnics and foundations of computer science

## 6 Awards

- Rudolf Kalman Professor Title, Obuda University, Hungary (2022)
- Honorary Professor at Bharath Institute of Higher Education and Research, India (2022)
- Adjunct Professor at Chandigarh University (2022)
- AAIA Fellow (2022), Asia-Pacific Artificial Intelligence Association
- IEEE Communications Society Big Data Technical Committee Distinguished Technical Achievement Award (2020), for outstanding technical leadership and achievements in big data and applications
- Honorary Professor at Galgotias University, India (2020)
- IEEE Technical Activities Board Hall of Honor (2019), for promoting holistic cooperation within TAB and across IEEE Operating Units
- IEEE Italy Section Distinguished Service Award (2019), for exceptional contributions and service for the benefit and advancement of the IEEE Italy Section
- IEEE Systems Council Outstanding Service Award (2018)
- Honorary Professor at Northeastern University, China (2018)
- Honorary Professor at Amity University, India (2017)
- Honorary Professor at Muroran Institute of Technology, Japan (2016)
- Honorary Professor at Obuda University, Hungary (2014)
- Honorary Professor at Guangdong University of Petrochemical Technology, China (2014)
- IEEE-RIVF International Conference on Computing and Communication Technologies Outstanding Contribution Award (2013) in recognition of the outstanding leadership and services to the conference series
- IEEE Ambassador (2012), to increase the awareness about IEEE in scientific and technological communities and the general public, in recognition of excellence in research, education, and service
- Admitted to the IEEE-HNK (2011), the honor society of the IEEE, for excellence in research, education, and service to the communities of information and communication technology and the related disciplines
- Distinguished Lecturer of the IEEE Systems Council for biometric technology and applications (2011)
- Runner-up Best Paper Award of the 2010 IEEE International Joint Conference on Neural Networks, for the paper: S. Ferrari, F. Bellocchio, V. Piuri, and N. Borghese, “Multi-scale support vector regression,” in Proceedings of IEEE International Joint Conference on Neural Networks, Jul. 2010, pp. 2159-2164
- INNS Senior Member (2009)
- IEEE Computational Intelligence Society Meritorious Service Award (2009) for leadership and dedication to the Computational Intelligence Society and for having stimulated the active cooperation among volunteers
- ACM Distinguished Scientist (2008) for his contribution to neural networks and digital embedded architectures for industrial applications
- IEEE Instrumentation and Measurement Society Distinguished Service Award (2008)
- IEEE Instrumentation and Measurement Society Technical Award (2002) for the contributions to the advancement of theory and practice of computational intelligence in measurement systems and industrial applications
- IEEE Fellow (2001) for contributions to neural networks techniques and embedded digital architectures for industrial applications
- Meeting Planner of the Year (2000 and 2003), jointly presented by the “Zitelle” Congress Center, Venice, Italy, and the monthly magazine “Meeting & Congressi”
- Certificate of Appreciation of the IEEE Computer Society (2001) for the services as General Chair of the 2001 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems
- Certificate of Appreciation of the IEEE Computer Society (2000) for the services as Chair of the Technical Activity Committee on Defect Tolerance of the Test Technology Technical Council in the period 1993-2000, and as member of the steering committee, General Chair and Program Chair of the IEEE International Workshop/Symposium on Defect and Fault Tolerance in VLSI Systems
- IEEE Senior Member (1996)

## 7 Associations

- IEEE (Fellow) - Institute of Electrical and Electronic Engineers
- ACM (Distinguished Scientist) - Association for Computing Machinery
- IFIP WG 11.3 (Member) - IFIP Working Group on Data and Application Security and Privacy
- INNS (Senior Member) - International Neural Network Society
- IMACS - International Association for Mathematics and Computers in Simulation
- CLAIRE - Confederation of Laboratories for Artificial Intelligence Research in Europe

- AEIT - Italian Federation for Electrotechnics, Electronics, Automation, Informatics and Telecommunications (formerly, Associazione Elettrotecnica ed Elettronica Italiana, AEI)
- SIREN - Italian Society for Neural Networks

## 8 Organization

### 8.1 Research activities

#### *Research organization*

- Director of the Industrial, Environmental and Biometric Informatics Laboratory, Department of Computer Science, Università degli Studi di Milano (since 2015)
- Member of the Scientific Committee of the European Centre for Soft Computing, Mieres, Spain (2012-2015)
- Director of the Industrial and Environmental Informatics Laboratory, Department of Computer Science, Università degli Studi di Milano (2006-2015)
- Member of the Interdisciplinary Center for Nanostructured Materials and Interfaces (CIMAINE), Università degli Studi di Milano (2002-2010)
- Scientific manager for research projects at Politecnico di Milano and Università degli Studi di Milano, funded by the Italian Ministry of University and Scientific and Technological Research, the European Union, the National Research Council of Italy, the Italian Space Agency, and industries (since 1994)
- Member of the Committee for the Scientific Research and Technology Transfer of the Università degli Studi di Milano (2006-2011), elected by the faculty members in information technology
- Member of the Research Center for the Entrepreneurship Development (CERSI) of the Catholic University of the Sacred Heart, Milan (2007-2009)
- Director of the Biometric Systems Laboratory, Department of Information Technology, Università degli Studi di Milano (2003-2009)
- Member of the Committee on Information Technology for the Scientific Research and Technology Transfer of the Università degli Studi di Milano (2003-2006), elected by the faculty members in information technology
- Scientific manager of the Advanced Research Center on Evolutionary Knowledge for Design Innovation by High-Performance Computing, Department of Information Technology, Università degli Studi di Milano (2002-2007), directed to study evolutionary and adaptive computational intelligence approaches to knowledge analysis and discovery for advanced design methodologies, products, and industrial applications, by using supercomputing environments (sponsored by the companies of the Finmeccanica Group: Laben SpA, Space Software Italia SpA, Quadrics Supercomputers World Ltd)

#### *Management of research projects*

- Scientific manager of the Research Unit at Università degli Studi di Milano in the EU project “Edge AI Technologies for Optimised Performance Embedded Processing - EdgeAI”, HORIZON JU Research and Innovation Actions 101097300 (2022-2025), for studying and implementing intelligent processing solutions at the edge in manufacturing systems
- Scientific manager of the Research Unit at Università degli Studi di Milano in the project “Contactless multibiometric mobile system in the wild (COSMOS)”, PRIN 201548C5NT (2017-2020), for studying less-constrained biometric techniques, funded by MIUR - the Italian Ministry of University and Research
- Scientific manager of the Research Unit at Università degli Studi di Milano in the EU project “ABC gates for Europe - ABC4EU”, FP7-SECURITY 312797 (2013-2018), for studying and implementing an innovative, integrated, interoperable and citizen’s rights respectful ABC system at EU level
- Scientific manager of the industrial research contracts of Università degli Studi di Milano with Edison (2013-2014 and 2014-2015) to study prediction techniques for alternative energies management and pricing
- Deputy scientific manager of the Research Unit at Università degli Studi di Milano in the EU project “Innovative poplar low density structural panel - I-PAN”, FP7-ENVIRONMENT 308630 (2012-2015), for studying and implementing an adaptive monitoring and control system for advanced poplar lightweight panel production
- Coordinator of the task “State-of-the-Art Analysis on the Multi-objective Optimization Techniques for Maintenance Scheduling in Electrical Power Distribution Networks” in the Project “NEXT FFM” Field Force Management”, Università degli Studi di Salerno, funded by MIUR - the Italian Ministry of Education, University and Research within the National Operating Program (Programma Operativo Nazionale) “Research and Competitiveness” (2007-2013), for the design and implementation of an optimized maintenance management system in complex electric power distribution networks



- Italian scientific co-liaison in the EU COST Action “Intelligent Monitoring, Control and Security of Critical Infrastructure Systems - IntelliCIS” (2009-2013), for developing innovative intelligent monitoring, control and safety methodologies for critical infrastructure systems, such as electric power systems, telecommunication networks, and water distribution systems
- Scientific manager of the Research Unit at Università degli Studi di Milano in the project “Privacy aware processing of encrypted signals for treating sensitive information” (2008-2010), for studying biometric information processing techniques ensuring privacy protection, funded by MIUR - the Italian Ministry of Education, University and Research
- Scientific manager of the Research Unit at Università degli Studi di Milano in the project “System for interpreting SAR images - GUTTER - preliminary analysis ” (2004), for analyzing Earth images for environmental applications, funded by ASI - the Italian Space Agency
- Scientific manager of the Research Unit at Università degli Studi di Milano in the project “Perceptive agencies for environmental monitoring” (2003-2004), for the implementation of a multi-agent cooperative environment for collecting and analyzing environmental measurements, funded by MIUR - the Italian Ministry of Education, University and Research
- Scientific manager of the project “Biometric methodologies and techniques for security: identification and recognition of persons” (2003-2004), for the study of biometric solutions for person identification and recognition in security applications, funded by Fondazione CARIPLO
- Accomplished the functions of scientific manager of the Research Unit at Università degli Studi di Milano in the project “COSMO/Skymed Mission Planning” (2003), for studying optimization techniques for planning the collection of Earth-observation images from the satellites, funded by ASI - the Italian Space Agency
- Scientific manager of the Research Unit at Politecnico di Milano in the EU IMS-BRITE project “Self-tuning and user-independent laser material processing units - SLAPS” (1999-2002), for the implementation of a laser cutting and welding cell controlled by using neural techniques, in cooperation with Philips, Centro Ricerche FIAT, LaserZentrum Hannover, Trumpf, e Jurca
- Accomplished the functions of scientific manager of the Research Unit at Politecnico di Milano in the EU CRAFT project “An integrated system for on-line inspection of railways tracks” (TRACKS), FP4-BRITE/EURAM 3 - CRAFT - BE-S2-5466 (1998-2000), for the implementation of a non-invasive neural-based monitoring and measurement system for the profile of railways tracks working on carriages moving at normal operating speed
- Accomplished the functions of scientific manager both of the Research Unit at Politecnico di Milano and the whole national project “Design of composite systems”, funded by MURST - the Italian Ministry for University, Research and Scientific and Technological Research (1998-1999)
- Scientific manager of the industrial research contracts of Politecnico di Milano with ENEL (1995-1997)
- Accomplished the functions of scientific manager both of the Research Unit at Politecnico di Milano and the whole national project “Methodologies and design techniques for heterogeneous systems based on neural architectures”, funded by MURST - the Italian Ministry for University, Research and Scientific and Technological Research (1996)
- Scientific manager of the industrial research contracts of Politecnico di Milano with Autostrade Centro-Padane (1994-1996)
- Accomplished the functions of scientific manager both of the Research Unit at Politecnico di Milano and the whole national project “Analysis and optimization of neural paradigms and architectures oriented to the digital implementation on silicon”, funded by MURST - the Italian Ministry for University, Research and Scientific and Technological Research (1993-1995)

#### *Participation in research projects*

- “SEcurity and RIghts in the CyberSpace” (SERICS), PNRR MUR (2022-2025)
- “Green responsibLe privACy preservIng dAta operATIOns” (Glaciation), H2020-EU.2.4 (2022-2025)
- “Machine Learning-Based, Networking and Computing Infrastructure Resource Management of 5G and Beyond Intelligent Networks” (MARSAL), H2020-EU INDUSTRIAL LEADERSHIP ICT (2021-2023)
- “Multi-Owner data Sharing for Analytics and Integration respecting Confidentiality and OWNeR control” (MOSAICrOWN), H2020-EU.2.1.1 (2019-2021)
- “Enforceable Security in the Cloud to Uphold Data Ownership” (ESCUDO-CLOUD), H2020-EU.2.1.1 (2015-2017).
- “Privacy and Identity Management in Europe for Life” (PRIMELIFE), FP7-ICT - Specific Programme “Cooperation”: Information and Communication Technologies (2008-2011)
- “Privacy and Identity Management for Europe” (PRIME), FP6-IST - Information Society Technologies: thematic priority under the specific programme “Integrating and strengthening the European research area”

(2004-2008)

*Supervision of assistant research projects and positions*

- “Multi-biometric fusion for less-constrained biometrics” (Università degli Studi di Milano, 2018)
- “Analysis of functional and operating characteristics of adaptive less-constrained biometric systems” (Università degli Studi di Milano, 2015)
- “Analysis of operating characteristics of adaptive less-constrained biometric systems” (Università degli Studi di Milano, 2015)
- “Adaptive signal and image processing techniques for industrial and environmental applications” (Università degli Studi di Milano, 2016-2017)
- “Adaptive signal and image processing techniques for industrial and environmental applications” (Università degli Studi di Milano, 2015-2016)
- “Analysis of functional characteristics of adaptive less-constrained biometric systems” (Università degli Studi di Milano, 2015)
- “Adaptive signal and image processing techniques for industrial and environmental applications” (Università degli Studi di Milano, 2014-2015)
- “Analysis of functional characteristics of adaptive less-constrained biometric systems” (Università degli Studi di Milano, 2014)
- “Signal and image processing techniques for industrial applications” (Università degli Studi di Milano, 2014)
- “Analysis of functional characteristics of less-constrained biometric systems” (Università degli Studi di Milano, 2013-15)
- “Computational intelligence techniques for image processing” (Università degli Studi di Milano, 2011)
- “Computational intelligence techniques for environmental monitoring of critical infrastructures” (Università degli Studi di Milano, 2010), for young investigators without Ph.D. degree
- “Analysis of the architectural and functional characteristics of biometric systems” (Università degli Studi di Milano, 2009-2010)
- “Intelligent systems and global communication infrastructure for the information and knowledge society” (Università degli Studi di Milano, 2008-2009)
- “Evolutionary knowledge for innovating the information systems design methodologies by using high-performance systems” (Università degli Studi di Milano, 2005-2007)
- “Intelligent systems and global communication infrastructure for the information and knowledge society” (Università degli Studi di Milano, 2003-2004)
- “Person identification by biometric recognition” - No. 2 positions (Università degli Studi di Milano, 2003-2004)
- “Analysis and development of optimum allocation algorithms of distributed agencies for environmental monitoring” (Università degli Studi di Milano, 2003-2004)
- “Analysis, specification and development of methodologies and techniques for the analysis of air pollution” (Università degli Studi di Milano, 2003-2004)
- “Analysis, specification and development of the operating environment of distributed agencies for environmental monitoring” (Università degli Studi di Milano, 2003-2004)
- “Evolutionary knowledge for innovating the information systems design methodologies by using high-performance systems” (Università degli Studi di Milano, 2002-2004)
- “Composite techniques for image analysis in quality monitoring of manufacturing processes” (Politecnico di Milano, 2002)
- “Composite techniques for image processing in manufacturing processes” (Politecnico di Milano, 2002)
- “Information flow in adaptive information systems: from the observation of the user behavior to the evolutionary self-generation of the information system behavior” (Università degli Studi di Milano, 2001-2002)
- “Optimization of composite techniques for signal processing in laser-based manufacturing processes” (Politecnico di Milano, 2001-2002)

*Evaluation of research institutions*

- Computer Science and Informatics, Ulster University (2021)

*Evaluation of scientific projects*

- New Frontiers in Research Fund, Government of Canada, Canada (2021)
- Estonian Research Council, Estonia (2021)
- Research an Innovation Program, Tshwane University of Technology, South Africa (2021)

- "PNR 2015-2020" Program, MIUR Ministry of Higher Education and Research, Italy, (2020)
- "POR Campania FESR 2014-2020" Program, Campania Region, Italy (2019-2020)
- Natural Sciences and Engineering Research Council of Canada, Canada (2002, 2010-2012, 2016-2018, 2020-2021)
- "JA AAL Active and Assisted Living", MIUR Ministry of Higher
- JSC National Centre of Science and Technology Evaluation, Kazakhstan (2015, 2017-2019) Education and Research, Italy, (2018)
- Shota Rustaveli National Science Foundation, Georgia (2011-2018)
- MITACS, Canada (2016)
- "Futuro in Ricerca" Program, MIUR Ministry of Higher Education and Research, Italy, (2013)
- European Regional Development Fund, Regional Operating Program of the Lazio Region 2007-13 - Priority 1, Italy (2012-13)
- FAR 2012 Programs, MIUR Ministry of Higher Education and Research, Italy, (2012)
- Strategic Research Funding, City University of Hong Kong, Hong Kong (2012)
- National Science Foundation, USA, Project "Enhancing STEM (Science, Technology, Engineering and Mathematics) Education using Biometrics Applications to Security and Robotics for Emergency Management (BASREM)", New York University, Queens College, QueensBorough Community College, and John Jay College (2012)
- National Priorities Research Program, Qatar National Research Fund, Qatar (2009, 2011)
- PRIN Program, MIUR Ministry of Higher Education and Research, Italy, (2009-2010)
- Foundation for Polish Science, Poland (2009)
- Ontario Research Fund, Canada (2007)
- CONSOLIDER-Ingenio2010 Program, Ministry of Education and Science, Spain (2007)
- Hong Kong Research Grants Council, Hong Kong (2002)
- ASI Agenzia Spaziale Italiana - Italian Space Agency, Italy (2002)
- Italian Republic Council Presidency - Presidenza del Consiglio della Repubblica Italiana, Dipartimento Innovazione e Tecnologie, Italy, for the public competitive tender on e-government for the Italian public administration (2002)

#### *Technology transfer and spin-off companies*

- He was co-founder and president of Sensure s.r.l, Italy (2007-2010), an academic spin-off company of Università degli Studi di Milano, directed to design, implement and deploy advanced signal and image processing systems for industrial applications based on computational intelligence technologies. The company received several recognitions for innovation and high-technology products: it won the "Scouting ICT 2009" Award for the best industrial collaboration of the academic spin-offs in Milan, the "Universo 2007" Award for the promotion of academic spin-offs (BIC La Fucina, Lombardy Region), the "Matching competences 2005/06" (BIC La Fucina); it was among the top 20 national entrepreneurial projects of the Innovation National Award 2006, and won the third place of the Lombardy StartCup 2006.

#### *Design activities and public competitive tenders*

- Cooperation in the design and the supervision of the implementation of complex integrated information systems in health-care structures (1995-2000), specifically for the Hospital "S. Carlo Borromeo" in Milan, the USSL-Melegnano, the Lombardy Region - Directorate General for Experimentation in Milan, and the Hospital "Fatebenefratelli e Oftalmico" in Milan
- Selection committee member of public competitive tenders for advanced distributed information processing systems in public bodies (1993-2000), specifically Lombardy region, Marche Region, Cremona Province, Società Autostrade Centro-Padane, Politecnico di Milano, Hospital "S. Carlo Borromeo" in Milano, USSL Melegnano, Lombardy Region - Directorate General for Experimentation in Milan, and Club Alpino Italiano
- Cooperation in the design and the realization of distributed information processing systems in various campuses of Politecnico di Milano (1989-2000)
- Consultant for the restructuring, design and implementation of the information processing center of the Marche Region (1994)
- Technical committee reporting member of the "Lorenzo Lunelli Project" (1988), funded by Politecnico di Milano - Department of Electronics and Information, and the National Research Council of Italy - Research Centers CSISEI, CSTS e CST, directed to design and implement an advanced information processing system for the research and educational activities at the Department of Electronics and Information for the Nineties; he performed the preliminary and detailed designs and the whole restructuring of the department information processing system

### *Services for research and higher education*

- Chair of the Scientific Committee of the Computational Modeling of the Lombardy Inter-University Consortium for Information Processing (2003-2004)
- Member of the Scientific Committee of the Lombardy Inter-University Consortium for Information Processing, for the High-Performance Computing Section (2002-2004)

## **8.2 Editorial activities**

### *Editor-in-Chief of journals*

- IEEE Systems Journal (2013-19)

### *Editorial boards*

- Associate Editor of IEEE Open Journal of Systems Engineering (since 2022)
- Associate Editor of International Journal of Pattern Recognition and Artificial Intelligence, World Scientific (since 2021)
- Associate Editor of IEEE Transactions on Cloud Computing (2016-18)
- IEEE Transactions on Computers (2015-2017)
- Associate Editor of Majlesi Journal of Mechatronic Systems, Majlesi Publications Corporation, Iran (since 2013)
- Associate Editor of Acta Polytechnica Hungarica, Obuda University, Hungary (2012-2014)
- Associate Editor of Soft Computing, Springer (2011-2022)
- Editor-at-Large of the IEEE Computational Intelligence Magazine (2010-2014)
- Member of the Scientific Editorial Board of the Neural Network Technologies, Scientific Center for Neurocomputing, Moscow, Russia (2010-2011)
- Editor of the Biometrics Series of the IEEE eLearning Library (2009-2010)
- Member of the Scientific Editorial Board of the International Journal of Advanced Science and Technology, Science & Engineering Research Support Center, Republic of Korea (2009-2010)
- Member of the Editorial Board of the IEEE eLearning Library, formerly called IEEE Expert Now (2008-2010)
- Member of the Scientific Editorial Board of the Journal of Information Technology and Intelligent Computing, Academy of Humanities and Economics, Poland (2006)
- Member of the Scientific Editorial Board of the International Journal of Hybrid Intelligent Systems, Advanced Knowledge International and IOS Press, Australia (since 2003)
- Member of the Scientific Editorial Board of Computing, Ternopil Academy of National Economy, Ucraina (since 2002)
- Associate Editor of the IEEE Transactions on Neural Networks (2001-2004)
- Associate Editor of the Journal of Systems Architecture, Elsevier Science (2001-2004)
- Member of the Scientific Editorial Board of Mondo Digitale, AICA (2002)
- Associate Editor of the IEEE Transactions on Instrumentation and Measurement (1997-2002)
- Associate Editor of the International Journal of Integrated Computer-Aided Engineering, Wiley Interscience - John Wiley & Sons Inc. till 1997 and IOS Press since 1998 (1997-2001)

### *Guest editor/co-editor in journals*

- Special Issue on Big Data Analytics and Management in Internet of Things, in the IEEE Internet of Things Journal, 2015
- Special Issue on Biometric Systems and Applications, in the IEEE Transactions on Systems, Man and Cybernetics: Part A - Systems, 2014
- Special Issue on Cybermatics, in Science China (Information Science), 2014
- Special Issue on Information and Knowledge Technology for Computing and Communication, in Fundamenta Informaticae, 2013
- Special Section on Biometric Systems, in IEEE Systems Journal, 2009
- Special Section on Computational Intelligence for Measurement Systems and Applications, in IEEE Transactions on Instrumentation and Measurement, 2008
- Special Section on Virtual and Intelligent Measurement Systems, in IEEE Transactions on Instrumentation and Measurement, 2008
- Special Section on Defect and Fault Tolerance in VLSI Systems, in IEEE Transactions on Reliability, 2004

- Special Section on Virtual and Intelligent Measurement Systems, in IEEE Transactions on Instrumentation and Measurement, 2003
- Special Issue on Defect and Fault Tolerance in VLSI Systems, in International Journal of Systems Architecture, North-Holland Publishing Co, 2002
- Special Issue on expanded and extended versions of papers presented at the VIMS2000 symposium, in IEEE Instrumentation and Measurement Magazine, 2000
- Special Issues on expanded and extended versions of papers presented at the IMTC/99 conference, in IEEE Transactions on Instrumentation and Measurement, April 2000 and June 2000
- Special Issue on Industrial Application of Wavelet Transforms, in International Journal of Integrated Computer-Aided Engineering, IOS Press, 2000
- Special Issue on Neural Technologies for Industrial Application, in International Journal of Integrated Computer-Aided Engineering, IOS Press, 1999
- Special Issue on Neural Technologies for Identification, Control, Robotics, and Signal/Image Processing, in International Journal of Systems Architecture, North-Holland Publishing Co, 1998
- Special Issue on Defect and Fault Tolerance in VLSI Systems, in International Journal of Microelectronic Systems Integration, Plenum Press, 1997
- Special Issue on Neural Technologies for Identification, Control, Robotics, and Signal/Image Processing, in International Journal of Microelectronic Systems Integration, Plenum Press, 1997

#### *Steering Committees of journals*

- IEEE Transactions on Autonomous Mental Development, as liaison of the IEEE Computational Intelligence Society (2008-2010, member)
- IEEE Transactions on Information Forensics and Security, as liaison of the IEEE Computational Intelligence Society (2008-10, member)
- IEEE Transactions on Computational Intelligence and AI in Games, as liaison of the IEEE Computational Intelligence Society (2008-10, member)

#### *Advisory Committees of journals*

- Journal of Management Analytics, published by Taylor and Francis, UK (2014-2015, member)
- Journal of Engineering and Technology, published by Wolters Kluwer, India (2013-2015, member)
- ICST Transactions on Industrial Networks and Intelligent Systems, EAI-ICST (2013-2015, member)
- LPU Journal of Computing, published by LPU, Phagwara, India (2013, member)

#### *Reviewer for journals*

Reviewer for many IEEE journals and magazines, and other international scientific journals (since 1986), among which: IEEE Transactions on Computer, IEEE Transactions on Instrumentation and Measurement, IEEE Transactions on Reliability, IEEE Access, IEEE Computer Magazine, IEEE Instrumentation and Measurement Magazine, IEEE Parallel and Distributed Processing Magazine, International Journal of VLSI Design, International Journal of Microelectronic System Integration, International Journal on Integrated Computer-Aided Engineering, International Journal of Systems Architecture

#### *Book editor*

- Encyclopedia of Cryptography and Security (3rd edition), Editors: Sushil Jajodia, Pierangela Samarati, and Moti Yung, Springer, 2019-present (associate editor for biometrics)
- Encyclopedia of Cryptography and Security (2nd edition), Editors: Henk C.A. van Tilborg and Sushil Jajodia, Springer, 2011 (associate editor for biometrics)
- Neural Networks for Instrumentation, Measurement, and Related Industrial Applications, Editors: S. Ablameyko, L. Goras, M. Gori, and V. Piuri, IOS Press, 2003
- Limits and Future Trends of Neural Computing, Editors: S. Ablameyko, L. Goras, M. Gori, and V. Piuri, IOS Press, 2003
- Proceedings of the 2001 NATO ASI on Neural Networks for Instrumentation, Measurement, and Related Industrial Applications NIMIA2001: Study Cases, Crema, Italia, Editors: S. Ablameyko and V. Piuri, 2001
- Proceedings of the 2000 IEEE-INNS-ENNS International Joint Conference on Neural Networks IJCNN2000, Como, Italia, Editors: S.-I. Amari, C.L. Giles, M. Gori, and V. Piuri, 2000
- Proceedings of the IEEE International Workshop on Low-Power Design, Como, Italia, Editor: V. Piuri, 1999
- Proceedings of the 16th IEEE International Measurement Technology Conference IMTC/99, Venice, Italy,

Editors: V. Piuri and M. Savino, 1999

- Proceedings of the 1998 IEEE International Workshop on Emergent Technologies, Intelligent Measurement and Virtual System for Instrumentation and Measurement, St. Paul, MN, USA, Editors: S. Adam, E.M. Petriu, and V. Piuri, 1998

### 8.3 Conference activities

#### *Honorary chair (selected)*

- 3rd International Conference on Intelligent Machines, Tunis, Tunisia (2014, co-chair)
- 2012 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications, Tianjin, China (2012, co-chair)
- 2011 IEEE Symposium Series on Computational Intelligence, Paris, France (2011)
- 2011 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems, Ottawa, Canada (2011, co-chair)
- 6th International Symposium on Applied Computational Intelligence and Informatics, Timisoara, Romania (2011, co-chair)
- 2010 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems, Taranto, Italy (2010, co-chair)
- 2010 IEEE Workshop on Environmental, Energy, and Structural Monitoring Systems, Taranto, Italy (2010, co-chair)
- 5th International Symposium on Applied Computational Intelligence and Informatics, Timisoara, Romania (2009, co-chair)
- International Workshop on Computational Intelligence in Security for Information Systems, Genova, Italy (2008, co-chair)
- 4th International Symposium on Applied Computational Intelligence and Informatics, Timisoara, Romania (2007, co-chair)

#### *General chair (selected)*

- 15th IFIP International Conference on Trust Management (IFIPTM 2024), United Kingdom (2024, co-chair)
- 2014 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications, Ottawa, Canada (2014, co-chair)
- 2014 International Conference on Intelligent Computing ICIC, Taiyuan, China (2014, co-chair)
- 9th International Conference on Communications and Networking in China, Maoming, China (2014, co-chair)
- 2013 IEEE International Conference on Internet of Things, Beijing, China (2013, co-chair)
- 2013 IEEE-RIVF International Conference on Research, Innovation and Vision for the Future in Information and Communication Technologies, Hanoi, Vietnam (2013, co-chair)
- 2013 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications, Milan, Italy (2013, co-chair)
- 2013 International Symposium on Innovations in Intelligent Systems and Applications, Albena, Bulgaria (2013, co-chair)
- 10th IEEE International Conference on Pervasive Intelligence and Computing, Changzhou, China (2012, co-chair)
- 2012 IEEE Workshop on Biometrics Measurements and Systems for Security and Medical Applications, Salerno, Italy (2012)
- 2012 International Symposium on Innovations in Intelligent Systems and Applications, Trabzone, Turkey (2012, co-chair)
- 2010 International Symposium on Innovations in Intelligent Systems and Applications, Kayseri, Turkey (2010, co-chair)
- 2010 IEEE Workshop on Biometrics Measurements and Systems for Security and Medical Applications, Taranto, Italy (2010)
- 2009 IEEE Symposium Series on Computational Intelligence, Nashville, TN, USA (2009)
- 2009 IEEE International Instrumentation and Measurement Technology Conference, Singapore (2009)
- 2007 IEEE Symposium on Computational Intelligence in Security and Defense Applications, Honolulu, HI, USA (2007, co-chair)
- 2006 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety, Alexandria, VA, USA (2006, co-chair)

- 2006 IEEE International Workshop on Measurement Systems for Homeland Security, Contraband Detection, and Personal Safety, Alexandria, VA, USA (2006, co-chair)
- 2005 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety, Orlando, FL, USA (2005, co-chair)
- 2005 IEEE International Workshop on Measurement Systems for Homeland Security, Contraband Detection, and Personal Safety, Orlando, FL, USA (2005, co-chair)
- 2004 IEEE International Instrumentation and Measurement Technology Conference, Como, Italy (2004, co-chair)
- 2004 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety, Venice, Italy (2004, co-chair)
- 2003 IEEE International Symposium on Computational Intelligence for Measurement Systems and Applications, Lugano, Switzerland (2003, co-chair)
- 2002 IEEE International Symposium on Virtual and Intelligent Measurement Systems, Girdwood, AK, USA (2002, co-chair)
- 2000 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems, Tokyo, Japan (2000, co-chair)
- 1999 IEEE International Workshop on Virtual and Intelligent Measurement Systems, Venice, Italy (1999)

*Program chair (selected)*

- 2012 IEEE-RIVF International Conference on Research, Innovation and Vision for the Future in Information and Communication Technologies, Ho Chi Minh City, Vietnam (2012, co-chair)
- 2010 IEEE-INNS International Joint Conference on Neural Networks, Barcelona, Spain (2010)
- 2010 IEEE International Instrumentation and Measurement Technology Conference, Austin, TX, USA (2010)
- 2010 IAPR Workshop on Emerging Techniques and Challenges for Hand-based Biometrics, Istanbul, Turkey (2010, co-chair)
- 2010 IEEE-RIVF International Conference on Research, Innovation and Vision for the Future in Information and Communication Technologies, Hanoi, Vietnam (2010, computational intelligence track co-chair)
- 2009 IEEE-INNS International Joint Conference on Neural Networks, Atlanta, GA, USA (2009, vice chair)
- 2009 IEEE-RIVF International Conference on Research, Innovation and Vision for the Future in Information and Communication Technologies, Da Nang City, Vietnam (2009, computational intelligence track co-chair)
- 2004 IEEE-INNS International Joint Conference on Neural Networks, Budapest, Hungary (2004, international program committee coordinator)
- 2004 ACM International Conference on Computing Frontiers, Ischia, Italy (2004, co-chair)
- 2003 IEEE International Workshop on Soft Computing Techniques in Instrumentation, Measurement and Related Applications, Provo, UT, USA, (2003, co-chair)
- 2003 IEEE International Workshop on Advanced Environmental Sensing and Monitoring Technologies, Como, Italy (2003, co-chair)
- 2001 IEEE International Workshop on Advanced Environmental Sensing and Monitoring Technologies, Milan, Italy (2001, co-chair)
- 2000 IEEE-INNS-ENNS International Joint Conference on Neural Networks, Cernobbio, Italy (2000, co-chair)
- 1999 IEEE International Instrumentation and Measurement Technology Conference, Venice, Italy (1999, co-chair)
- 1999 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems, Albuquerque, NM, USA (1999, co-chair)
- 1998 IEEE International Workshop on Emergent Technologies, Intelligent Measurement and Virtual System for Instrumentation and Measurement, St. Paul, MN, USA (1998, co-chair)
- 1997 IEEE International Workshop on Emergent Technologies and Virtual System for Instrumentation and Measurement, Niagara Falls, Canada (1997, co-chair)
- 1996 IEEE International Workshop on Neural Networks for Identification, Control, Robotics, and Signal/Image Processing, Venice, Italy (1996)
- 1996 IEEE International Workshop on Emergent Technologies for Instrumentation and Measurement, Como, Italy (1996)
- 1996 IEEE International Symposium on Circuits and Systems, Atlanta, GA, USA (1996, associate area coordinator for neural networks)

*Steering committees of conferences (selected)*

- IEEE-RIVF International Conference on Research, Innovation and Vision for the Future in Information and Communication Technologies (since 2013, member)
- IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (since 2012, co-chair)
- 9th IEEE International Conference on Computational Cybernetics (2013, member)
- IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (2003-12, chair)
- IEEE International Conference on Virtual Environments, Human-Computer Interfaces, and Measurement Systems (2008-12, co-chair)
- IEEE International Conference on Imaging Systems and Techniques (2010-12, member)
- IEEE International Instrumentation and Measurement Technology Conference (2000-05, 2008-10, member)
- IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (1997-2007, member)
- IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety (2003-06, co-chair)
- IEEE International Workshop on Measurement Systems for Homeland Security, Contraband Detection and Personal Safety (2004-06, co-chair)
- ACM International Conference on Computing Frontiers (2004-05, member)
- IEEE International Symposium on Virtual and Intelligent Measurement Systems (2002, member)
- IEEE International Workshop on Virtual and Intelligent Measurement Systems (1996-2001, member)

*Other positions in conferences (selected)*

- IFIP WG12.5 International Conference on Artificial Intelligence Applications and Innovations (2020, Advisory co-chair)
- 2014 International Conference on Innovative applications of Computational Intelligence on Power, Energy, Control and its impact on Humanity, Ghaziabad, India (2014, International Advisory Board Member)
- 2014 IEEE International Conference on Frontiers of Information Technology, Islamabad, Pakistan (2014, Steering Committee Member)
- 2014 International Conference on Industrial and Information Systems, Gwalior, India (2014, Advisory Committee Member)
- 2014 International Conference on Extreme Learning Machines, Singapore (2014, Advisory Committee Member)
- 2014 IEEE Symposium on Computational Intelligence for Security and Defense Applications, Orlando, FL, USA (2014, Advisory Committee Member)
- 4th Annual World Congress of U-World-2014, Dalian, China (2014, Scientific Advisory Committee Member)
- International Conference on Telecommunications and Multimedia, Heraklion, Greece (2014, Tutorial Chair)
- 4th International Symposium on Biometrics and Security Technologies, Kuala Lumpur, Malaysia (2014, Advisory Committee Member)
- 2013 IEEE International Workshop on Intelligent Signal Processing, Funchal, Portugal (2013, Honorary Committee Member)
- 2013 IEEE Symposium Series on Computational Intelligence, Singapore (2013, Advisory Committee Member)
- 4th Joint International Conference on Swarm , Evolutionay and Memetic Computing, Chennai, India (2013, Advisory Committee)
- 2012 International Symposium on Extreme Learning Machines, Singapore (2012, Advisory Committee Member)
- Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (2020, Local Organizing Committee)
- 2009 International Conference on Intelligent Systems Design and Applications, Pisa, Italy (2009, Advisory Committee Member)
- IFIP TC11 International Conference on Information Security (2008, Local Organizing Committee)
- 2007 International Symposium on Neural Networks, Nanjing, China (2007, Advisory Committee Member)
- 2007 Biometrics Symposium, Baltimore, MD, USA (2007, IEEE Co-Liaison)
- 1993 IEEE International Conference on Application Specific Array Processors, Venice, Italy (1993, finance chair)
- 1993 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems, Venice, Italy (1993, finance chair)



*Special session organizer*

IEEE World Congress on Computational Intelligence (2012), IEEE Instrumentation and Measurement Technology Conference (2000-02, 1998), KES International Conference on Knowledge-based Intelligent Engineering and Information Systems (2002), ISATA International Symposium on Automotive Technologies and Automation (1998, 1997), IEEE Conference on Computational Engineering in Systems Applications (1998, 1996), IMACS World Congress (1997, 1994), IEEE International Symposium on Circuits and Systems (1996, 1995), IEEE International Conference on Systems, Man, and Cybernetics (1996), IEEE International Midwest Symposium on Circuits and Systems (1995)

*Member of technical program committee of conferences (selected)*

IMEKO World Congress (2015), IEEE-INNS International Joint Conference on Neural Networks IJCNN (2014-11, 2008, 2007, 2004), IEEE Congress on Evolutionary Computation CEC (2011-14), IEEE Instrumentation and Measurement Technology Conference IMTC (2011-14, 2005-08, 2000-03), IEEE International Conference on Communications ICC - Communication and Information Systems Security Symposium (2014, 2013, 2011, 2010, 2009), International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU (2014, 2010, 2008, 2006), IEEE Globecom Communication and Information System Security GLOBECOM CISS (2014, 2013, 2011, 2010), IEEE Globecom Wireless Communications Symposium GWCS (2014), Conference on Learning and Intelligent Optimization LION (2007-14), Pacific-Asia Conference on Knowledge Discovery and Data Mining PAKDD (2011-14, 2009, 2008, 2007), International Multi-Conference on Systems, Signals and Devices SSD (2014), International Conference on Pervasive and Embedded Computing and Communication Systems PECCS (2011-14), Workshop on Artificial Neural Networks and Intelligent Information Processing ANNIIP (2014), International Symposium on Security in Computing and Communications SSCC (2014), IEEE International Conference on Fuzzy Systems FUZZIEEE (2013, 2012), IEEE International Conference on Image Processing ICIP (2013, 2011), IEEE International Systems Conference (2014, 2013, 2011, 2010, 2009), International Conference on Fuzzy Systems and Knowledge Discovery FSKD (2013, 2012, 2010), International Conference on Natural Computation ICNC (2013), IEEE International Symposium on Trust, Security and Privacy for Emerging Applications TSP (2013, 2010), ENNS International Conference on Artificial Neural Networks ICANN (2013, 2010, 2009, 1997), IEEE International Conference on Emerging Technologies and Factory Automation ETFA (2013, 2012), World Congress on Information and Communication Technologies WICT (2013), IEEE International Workshop on Intelligent Signal Processing WISP (2013, 2011, 2009, 2007, 2005, 2003, 2001, 1999, 1997), IEEE International Workshop on Artificial Neural Networks IWANN (2013, 2011, 2007, 2005, 1997, 1995), International Conference on Intelligent Systems Design and Applications ISDA (2013, 2012), IEEE International Conference on Imaging Systems and Techniques IST (2013, 2012), International Workshop on Biometrics: Technologies, Systems and Applications BTSA (2013), Social Media SM (2013), IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications IDAACS (2013, 2011, 2009, 2001), International Symposium on Security in Computing and Communications (2013), European Society for Fuzzy Logic and Technology Conference EUSFLAT (2013, 2005), International Conference on Computer and Applications CCA (2013), International Workshop on Embedded and Ubiquitous (2013), International Conference on Connected Vehicles and Expo ICCVE (2013, 2012), International Multi-Topic Conference IMTIC (2013), IEEE Symposium on Computational Intelligence for Security and Defence Applications CISDA (2012), International Conference on Neural Networks and Artificial Intelligence ICCNAI (2012), International Conference on Frontier of Computer Science and Technology FCST (2012, 2011, 2010), IEEE International Conference on Imaging Systems and Techniques (2012), IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA (2012), IEEE International Conference on Virtual Environments, Human-Computer Interface, and Measurement Systems VECIMS (2012, 2006, 2005), IEEE International Conference on Intelligent Systems IS (2012), International Workshop on Smart Mobile Applications (2012, 2011), IAPR International Conference on Pattern Recognition and Information Processing PRIP (2011), International Symposium on Innovations in Intelligent Systems and Applications INISTA (2011, 2009), IEEE International Conference on Communications ICC - Computer and Communications Network Security Symposium (2007), AEIT Congress (2011), International Conference on Artificial Intelligence and Soft Computing ICAISC (2010, 2008, 2006), International Conference on the Applications of Digital Information and Web Technologies ICADIWT (2010), IEEE Conference on High Performance Computing and Communications HPCC (2010), IEEE International Workshop on Electronic Design, Test and Applications DELTA (2010, 2008, 2006, 2004, 2002), International Conference on Neural Networks and Artificial Intelligence ICNNAI (2010, 2006, 2003), IMEKO World Congress on Fundamental and Applied Metrology (2009),

IEEE/IFIP International Symposium on Trusted Computing and Communications TRUSTCOM (2009), IEEE Globecom Computer and Communications Network Security Symposium GLOBECOM CCNS (2009, 2008), IEEE International Workshop on Haptic Audio Visual Environments and Games HAVE (2009), IEEE International Workshop on Haptic Audio Visual Environments and their Applications HAVE (2008, 2007), IEEE International Conference on Intelligent Systems ICIS (2008), IEEE International Symposium on Computer Science and its Applications CSA (2008), IEEE Workshop on Robust Biometrics: Understanding the Science and Technology ROBUST (2008), IEEE International Workshop/Symposium on Defect and Fault Tolerance in VLSI Systems DFT (2001-2007, 1994-1998), International Conference on Computational Intelligence for Modelling, Control and Automation CIMCA (2006), IMACS World Congress (2005, 1997, 1994), IEEE Sensors for Industry Conference SICON (2005, 2004), IEEE International Workshop on Robotic and Sensor Environments ROSE (2005), International Conference on Technology and Automation ICTA (2005), International Conference on Supercomputer Systems and Applications SSA (2004), IMACS-IEEE International Conference on Computational Engineering in Systems Applications CESA (2003, 1998), KES International Conference on Knowledge-based Intelligent Engineering and Information Systems KES (2003), IEEE International Conference on Computer Arithmetic ARITH (2001, 1999), Italian Workshop on Neural Networks WIRN (1998-2001), International Conference on Intelligent Agents, Web Technology and Internet Commerce IAWTIC (2001), Euromicro Workshop on Computational Intelligence (1998), IEEE International Conference on Architectures, Algorithms and Applications of Parallel Processing ICA3PP97 (1997), ISATA International Symposium on Automotive Technologies and Automation (1997), IEEE International Conference on Application-Specific Array Processors ASAP (1995, 1994), ISCA International Conference on Intelligent Systems (1996), ISCA Golden West Conference on Intelligent Systems (1995), BIAS Micro95 (1995), AICA Congress (1994), IMACS International Symposium SPRANN'94 (1994).

*Invited seminars and keynote speaker at conferences*

- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things,” in International Forum on Emerging Frontiers (iFEF 2025), May 2025 (panel).
- “Artificial Intelligence in Cloud Computing and Internet-of-Things,” 2025 World Summit and Expo on Electronics and Electrical Engineering (WSEEE-2025), Budapest, Hungary, May 2025.
- “Biometrics and AI: Challenges and Opportunities,” University of Science and Technology Beijing, Beijing, China, April 2025.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, 1st International Conference on Machine Intelligence and Data Science (MIDAS 2025), Odisha, India, March 2025.
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, 4th International Conference on Universal Threats in Expert Applications and Solutions (UNI-TEAS 2025), Jaipur & Bhopal, India, February 2025.
- “Biometrics and AI: Challenges and Opportunities”, 20th International Conference on Information Security (ICISS 2024), Jaipur, India, December 2024.
- “Artificial Intelligence in Embedded Systems and Edge Computing”, 3rd International Conference on Embedded Systems and Artificial Intelligence (ESAI 2024), Fez, Morocco, December 2024.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS 2024), Tamil Nadu, India, December 2024.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, International Conference on Artificial Intelligence and Emerging Technology (Global AI Summit - AISUMMIT-2024), Greater Noida, India, September 2024.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, 12th IEEE International Conference on Intelligent Systems (IS 2024), Varna, Bulgaria, August 2024.
- “Artificial Intelligence for Biometric Technologies and Systems”, 4th International Conference on Artificial Intelligence and Knowledge Processing (AIKP 2024), Johannesburg, South Africa, August 2024.
- “Artificial Intelligence for Biometric Technologies and Systems”, IEEE International Congress On Intelligent And Service-Oriented Systems Engineering (IEEE CISOSE 2024), Shanghai, China, July 2024.
- “Biometrics: Challenges and Opportunities”, in 38th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 2024), San Jose, CA, USA, July 2024.
- “Artificial Intelligence for Biometrics”, in 21st International Conference on Security and Cryptography (SECRYPT 2024), Dijon, France, July 2024.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 32th Italian Workshop on Neural Networks (WIRN 2024), Vietri sul Mare, Italy, June 2024.
- “Artificial Intelligence Technologies for Ambient Intelligence”, in 2024 International Conference on Digital

Technologies and Applications (ICDTA 2024), Fez, Morocco, May 2024.

- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 6th International Conference on Smart Systems and Inventive Technology (ICSSIT 2024), Tirunelveli, India, April 2024.
- “Artificial Intelligence for Biometric Technologies and Systems”, in 3rd International Conference on Universal Threats in Expert Applications and Solutions (UNI-TEAS 2024), Jaipur, India, January 2024.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2023 International Conference on Big Data, Computational Intelligence and Applications (BDCIA 2023), Huanggang, China, 2023.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2023 IEEE Future Technology Summit (FTS 2023), Athens, Greece, 2023.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 16th International Conference on Advanced Computer Theory and Engineering (ICACTE 2023), Hefei, Anhui, China, 2023.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2023 IEEE IAS Global Conference on Emerging Technologies (GlobConET 2023), London, U.K., 2023.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Conference on Computing and Communication Systems (I3CS 2023), Shillong, Meghalaya, India, 2023.
- “Artificial Intelligence for Medical Data Analysis and Decision Support”, in 3rd International Conference on Information Technology (InCITe 2023), Noida, India, 2023.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Conference on Modern Artificial Intelligence and Data Science Systems (MAIDSS 2023), Rabat, Morocco, 2023.
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2023 International Conference on Digital Technologies and Applications (ICDTA 2023), Fez, Morocco, 2023.
- “Artificial Intelligence in Industrial and Environmental Applications”, in 13th IEEE International Conference on Cloud Computing, Data Science & Engineering (CONFLUENCE 2023), Noida, India, 2023
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Conference on Data Engineering and Intelligent Systems (ICDEIS 2022), Chennai, India, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in IEEE International Conference on High Performance and Intelligent Computing (ICHPIC 2022), Tainan, Coimbatore, India, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in IEEE International Conference on Recent Advances in Systems Science and Engineering (RASSE 2022), Tainan, Taiwan, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Conference on Computing, Communication and Learning (COCOLE 2022), 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Conference on Technological Advancements in Computational Sciences 2022 (ICTACS-2022), Tashkent, Uzbekistan, 2022
- “Ambient Intelligence,” in 2022 IEEE Global Conference on Computing, Power and Communication Technologies (GlobConPT 2022), New Delhi, India, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2nd International Conference on Electronic Information Engineering and Computer Science (EIECS 2022), Changchun, China, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2022 International Seminar on Computational Intelligence, Tijuana, Mexico, 2022
- “Artificial Intelligence to Write Applications and Manage Cloud/Fog/Edge Computing and IoT Infrastructures”, in 2022 IEEE International Congress on Intelligent and Service-Oriented Systems Engineering and 2022 IEEE Future Technology Summit, San Francisco Bay Area, CA, USA, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2022 International Conference on Computer, Information, and Telecommunication Systems (CITS 2022), Athens, Greece, 2022
- “Ambient Intelligence: Adaptivity by using Artificial Intelligence, Machine Learning, and Biometrics in Worldwide Cloud-based Environments”, in Shanghai Jiao Tong University, Shanghai, China, 2022 (seminar)
- “Ambient Intelligence: Adaptivity by using Artificial Intelligence, Machine Learning, and Biometrics in Worldwide Cloud-based Environments”, in IEEE Smart Cities Week 2022, Dhaka, Bangladesh, 2022
- “Ambient Intelligence: Adaptivity by using Artificial Intelligence, Machine Learning, and Biometrics in Worldwide Cloud-based Environments”, in 2nd International Conference on Information Technology (InCITe), Noida, India, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, Colloquium series on “Sustainability and Beyond”, in Amrita University, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 3rd International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2022), 2022

- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2nd International Conference on Next Generation of Internet of Things (ICNGIoT 2022), Gunupur, India, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 12th International Conference on Cloud Computing, Data Science & Engineering (CONFLUENCE 2022), India, 2022
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 3rd International Conference on Advances in Distributed Computing and Machine Learning (ICADCML), Warangal, India, 2022
- “Artificial Intelligence for Advanced Biometrics”, in 17th International Conference on Ubiquitous Security (UbiSec 2021), Guangzhou, China, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 5th International Conference on Computing Science (ICCS 2021), Lovely Professional University, Jalandhar-Delhi, India, 2021
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 3rd International Conference on Applications of AI and Machine Learning, Patiala, Punjab, India, 2021
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Conference on Cyberspace Data and Intelligence 2021 (CyberDI 2021), China, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in International Conference on Information, Communication & Cybersecurity (INFOCOMCYBER 2021), Kouribga, Morocco, 2021
- “Artificial Intelligence for Biometric Technologies and Systems”, in 13th International Symposium on Cyberspace Safety and Security (CSS 2021), Copenhagen, Denmark, 2021
- “Artificial Intelligence for Biometric Technologies and Systems”, in Qatar University, Doha, Qatar, 2021 (seminar)
- “Ambient Intelligence in Cloud/Fog/Edge Computing and IoT”, in International Conference on Advancement in Computation and Computer Technologies (ICACCT-2021), Mohali, Punjab, India, 2021
- “Artificial Intelligence for Safety Critical Systems”, in Symposium on Artificial Intelligence-Machine Learning in Safety Critical Systems, Bangalore, India, 2021
- “Ambient intelligence: Convergence of Artificial Intelligence, Machine Learning, Biometrics, Cloud/Fog/Edge Computing and Internet-of-Things for Smart Environments”, in 15th International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS 2021), Nis, Serbia, 2021
- “Artificial Intelligence”, in International Discussion Forum 2021, Amity Universities, India, 2021 (seminar)
- “Artificial Intelligence in Cloud/Fog/Edge Computing and IoT”, in International Faculty Development Program on Research Methodology (IFDP-RM 2021), Galgotias University, Greater Noida, India, 2021
- “Artificial Intelligence for Biometrics”, in 2021 International Conference on Applications of AI and Machine Learning (ICAML 2021), Patiala, India, 2021
- “Ambient Intelligence: Convergence of Technologies for a Better Life of People”, in IEEE International Congress on Intelligent and Service-Oriented Systems Engineering & Future Technology Summit, 2021
- “Artificial Intelligence for Biometric Technologies and Systems”, in IEEE Beijing Section Biometric Council Chapter, 2021 (seminar)
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Workshop on Natural Inspired Computing Applied to Engineering, Chennai, India, 2021
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in 2021 IEEE 19th International Conference on Smart Technologies (EUROCON 2021), Kyiv, Ukraine, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 2021 International Conference on Communication Information and Computing Technology (ICCICT 2021), Mumbai, India, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 5th International Conference on Computing Sciences (ICCS 2021), Goa, India, 2021
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in International Conclave AI at the Edge: The Next Generation of Data Processing (AIE 2021), Delhi, India, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 2021 International conference on Advanced Computing and Intelligent Technologies (ICACIT 2021), Galgotias University, India & University of Siena, Italy, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 2nd Communication Technologies and Cloud Computing Conference (CTCCC 2021), Edinburgh, UK, 2021
- “Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”, in Ulster University, UK, 2021 (online seminar)
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 6th International Conference on Emerging Applications of Information Technology (EAIT 2021), Dhaka, Bangladesh, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in International Conference on Data Science and Management (ICDSM-2021), Kordha, Odisha, India, 2021
- “Dependable and Resilient Cloud Computing”, in 2021 IEEE Conference on Dependable and Secure Com-

- puting (DSC 2021), Aizuwakamatsu, Fukushima, Japan, 2021
- “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 2020 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT 2020), Bahrainm, 2020
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 11th International Conference on Electrical and Computer Engineering (ICECE 2020), Dhakka, Bangladesh, 2020
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in Christ University, Bangalore, India, 2020 (international online webinar)
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in MNNIT & IEEE MNNIT Student Branch, Allahabad, India, 2020 (international online webinar)
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 3rd International Conference on Applied Informatics (ICAI 2020), Ota, Nigeria, 2020
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in Consulting Engineers Association of India, India, 2020 (international online webinar)
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in Automation 2020 Conference, Kyiv, Ukraine, 2020
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in Computer Society of India, Bangalore, India, 2020 (international online webinar)
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in 7th International Conference on Multimedia Computing and Systems (ICMCS 2020), Tangier, Morocco, 2020
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in Staffordshire University, U.K., 2020 (international online webinar)
  - “Artificial Intelligence in Internet-of-Things”, in International Development Centre Foundation, New Delhi, India, 2020 (international online webinar)
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in International Webinars on Advances on E-Services 2020 (i-Waves 2020), IIS Jaipur, India, 2020 (international online webinar)
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in Machine Intelligence Research Labs, Auburn, WA, USA, 2020 (international online webinar)
  - “Artificial Intelligence in Cloud Computing and Internet-of-Things”, in Galgotias University & IEEE Student Branch Galgotias University, Greater Nodia, India, 2020 (international online webinar)
  - “Artificial Intelligence in Internet of Things”, in the Annual meeting of the IEEE Communication Society Technical Committee on Big Data, 2014.
  - “Dependable Cloud Computing Frameworks for Critical Monitoring and Control Applications”, in the 11th IEEE International Conference on Networking, Sensing and Control (ICNSC 2014), Miami, FL, USA, 2014
  - “Biometric Technologies for Ambient Intelligence in Internet-of-Things Environments”, in the 17th International Conference on Network-Based Information Systems (NBIS 2014) and the 6-th International Conference on Intelligent Networking and Collaborative Systems (INCoS 2014), Salerno, Italy, 2014
  - “Biometric Technology and Applications”, in the 9th International Conference on Communications and Networking in China (ChinaCom 2014), Maoming, China, 2014
  - “Dependable Cloud Computing Frameworks for Critical Applications in Monitoring and Control”, in the 11th IEEE International Conference on Networking, Sensing and Control, Miami, FL, USA, 2014
  - “Using Biometric Technologies for Smart Cities and Adaptive Environments”, New Jersey Institute of Technology & IEEE North Jersey Section Microwave Theory and Techniques Chapter, Newark, NJ, USA, 2014
  - “Dependable Cloud Computing”, in the 10th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2013), 10th IEEE International Conference on Autonomic and Trusted Computing (ATC 2013), and 13th International Conference on Algorithms and Architectures for Parallel Processing (AAPP 2013), Vietri sul Mare, Italy, 2013
  - “Reconstruction of 3D surfaces”, in the 8th International Conference on Embedded and Multimedia Computing (EMC 2013), Taipei, Taiwan, 2013
  - “Biometric technologies and applications for smart cities and an intelligent planet”, Institute of Automation, Chinese Academy of Science, Beijing, China, 2013
  - “Dependability in Cloud Computing”, in the 8th International Conference on Communications and Networking in China (ChinaCom 2013), Guilin, China, 2013
  - “Dependable User-Centric Operations in Cloud Computing”, in the 20th Workshop on Intelligent Machines: Theory and Applications, Sousse, Tunisia, 2013
  - “Biometric technologies and applications for intelligent transportation”, in the International Conference on Advanced Logistics and Transport (ICALT’2013), Sousse, Tunisia, 2013
  - “Biometric technologies and applications for a smart city”, in the APEC Smart City Industrial Technology

Cooperation Forum, Changzhou, China, 2012

- “Biometric systems: technologies and applications”, in the 5th International Conference on Security of Information and Networks (SIN 2012), Jaipur, India, 2012
- “Computational intelligence for surface modeling”, in the 7th International Conference on Neural Networks and Artificial Intelligence (ICNNAI 2012), Minsk, Belarus, 2012
- “Holonc Systems as Software Paradigms for Industrial Automation and Environmental Monitoring”, in 2011 IEEE Workshop on Intelligent Agents, part of the 2011 IEEE Symposium Series on Computational Intelligence (SSCI 2011), Paris, France, 2011
- “Holonc Systems: a Software Paradigm for Engineering Applications and Service-Oriented Architectures”, in 2011 IEEE International Workshop on New Trends of Computational Intelligence in Engineering Informatics, Salerno, Italy, 2011
- “Hierarchical Neural-based Techniques for Regression”, in 2011 International Symposium on Innovations in Intelligent Systems and Applications (INISTA 2011), Istanbul, Turkey, 2011
- “Biometrics Privacy: Technologies and Applications”, in 2011 International Joint Conference on E-Business and Telecommunications (ICETE 2011), Seville, Spain, 2011
- “Neural Techniques for 3D Surface Reconstruction”, in 2011 Seventh International Conference on Intelligent Computing (ICIC 2011), Zhengzhou, China, 2011
- “3D Surface Modeling: from 3D Scanning to Neural-Based Surface Reconstruction”, in Eurographics Italian Chapter Conference, Salerno, Italy, 2011
- “Biometrics Privacy”, in 2008 IEEE International Conference on Research, Innovation and Vision for the Future in Information and Communication Technologies (RIVF’08), Ho Chi Minh City, Vietnam, 2008
- “Biometrics Privacy”, in Workshop on Biometrics and Computational Intelligence, part of the 2007 IEEE International Joint Conference on Neural Networks (IJCNN’07), Orlando, FL, USA, 2007
- “Computational intelligence for Biometrics”, in International Conference on Natural Computation (ICNC’06) and International Conference on Fuzzy Systems and Knowledge Discovery (FSKD’06), Xi’an, China, 2006
- “Computational intelligence for industrial quality control”, Chiao Tung University and IEEE CIS Taipei Chapter, Taipei, Taiwan, R.O.C., 2006
- “Computational intelligence for industrial quality control”, National Cheng Kung University and IEEE CIS Tainan Chapter, Tainan, Taiwan, R.O.C., 2006
- “Computational intelligence for Biometrics”, Xidian University, Xi’an, China, 2006
- “Computational intelligence for Biometrics”, Hong Kong Polytechnic University, Hong Kong, 2006

#### *Tutorials*

- V. Piuri, F. Scotti, “Biometrics for ambient intelligence in the internet of things”, in the 2013 IEEE International Conference on Internet of Things, Beijing, China, 2013
- V. Piuri, F. Scotti, “Biometrics Privacy: Technologies and Applications”, in the 2011 IEEE International Systems Conference, Montreal, Canada, 2011
- V. Piuri, S. Ferrari, F. Bellocchio, “3D Scanners: State of the Art”, IEEE International Instrumentation and Measurement Technology Conference, Singapore, 2009; also distributed online on the educational web site of the IEEE Instrumentation and Measurement Society
- V. Piuri, F. Scotti, “Implementations of Computational Intelligence Techniques”, IEEE Expert Now, IEEE, ISBN: 0-7803-9671-5, 2007
- V. Piuri, “Composite Technologies for Intelligent Industrial Laser Processing”, IEEE International Conference on Sensors for Industry Sicon/02, Houston, TX, USA, 2002

#### *Panels*

- “Artificial Intelligence for Industry and Energy: Advancing the Digital Transformation”, in 16th International Annual Conference (AEIT 2024), Trento, Italy, 2024
- “Biometrics for Smart Cities”, in the APEC Smart City Industrial Technology Cooperation Forum, Changzhou, China, 2012
- “Real World Applications of Computational Intelligence”, IEEE World Congress on Computational Intelligence WCCI2012, Brisbane, Australia, 2012

### **8.4 Educational activities**

#### *International programs*

- Director of the 4EU+ International Summer School on Artificial Intelligence, 4EU+ Alliance - Flagship 3, 15-19 August 2022

- Co-Coordinator of the 4EU+ Online Seminar Series on "Security, Privacy, and Data Protection", 4EU+ Alliance - Flagship 3, 2021-2022
- Co-Coordinator of the 4EU+ Online Seminar Series on "Artificial Intelligence Techniques, Applications, and Social Issues", 4EU+ Alliance - Flagship 3, 2021
- Leading proposer of the Dual Ph.D. Degree programs in Computer Science of the Università degli Studi di Milano (Italy) with Universidad de Oviedo (Oviedo, Spain, established in 2011), Obuda University (Budapest, Hungary, established in 2011), Vietnam National University - Ho Chi Minh City (Ho Chi Minh City, Vietnam, established in 2011), National Cheng Kung University (Tainan, Taiwan, established in 2008); he has also been appointed as Co-Chair of the Admission Committees representing the Università degli Studi di Milano and Delegate of the Director of the Ph.D. School in Information Technology at the Università degli Studi di Milano for the management of these agreements
- Director of the international educational program "Information, communication and knowledge science and technology" (2003-05), directed to promote the international exchange of students and lecturers among the Università degli Studi di Milano (Italy), the University of Pisa (Italy), the University of Venice (Italy), Carnegie Mellon University (USA), and University of Ottawa (Canada), funded by the Italian Ministry of Education, University and Research in the Program "Internationalization of the Italian Academic System"
- Director of the International Master's Degree Program on Soft Computing for Industrial Applications (2003-04), Università degli Studi di Milano (Italy), with the scientific cooperation of Carnegie Mellon University (USA), Örebro University (Sweden), University of Ottawa (Canada), University of Siena (Italy), and Warsaw University of Technology (Poland), and with the support of the IEEE Neural Networks Society, IEEE Instrumentation and Measurement Society, INNS - International Neural Networks Society, ENNS - European Neural Network Society, and SIREN - Società Italiana Reti Neurali
- Scientific Co-Director of the NATO-IEEE-INNS-ENNS Advanced Study Institute on Neural Networks for Instrumentation, Measurement, and Related Industrial Applications NIMIA2001, Crema, Italy, 2001

#### *National programs*

- Main designer and Chair of the Educational Council of the M.S. Degree Program in Artificial Intelligence for Science and Technology, co-organized by Università degli Studi di Milano, Università degli Studi di Milano-Bicocca and Università degli Studi di Pavia, Italy (since 2022)
- Main designer and Vice President of the Educational Council of the Joint Bachelor Degree Program in Artificial Intelligence, co-organized by Università degli Studi di Milano, Università degli Studi di Milano-Bicocca and Università degli Studi di Pavia, Italy (2021-2023)
- Director of the Curriculum "Multi-dimensional Signal Processing and Applications" of the Ph.D. School in Information Technology at the Università degli Studi di Milano, Italy (since 2008)
- Member of the Council of the Ph.D. School in Information Technology at the Università degli Studi di Milano, Italy (since 2008)
- Director of the Ph.D. Degree Program in Computer Science, Università degli Studi di Milano, Italy (2005-07)
- Coordinator of the project for the creation of the Ph.D. School in Information Technology at the Università degli Studi di Milano, Italy (2007), and Director ad interim of this School (5 May - 30 September 2007)
- Member of the Milan Section Scientific Council of the Lombardy Inter-University Specialization School for High-School Educators SILSIS (1999-2002), representing Politecnico di Milano (1999-2000) and Università degli Studi di Milano (2000-02) for the area of the information and communication technology
- Scientific coordinator of the post-high-school professional education in information and communication technologies (IFTS) for the Università degli Studi di Milano - Department of Information Technology: "Advanced technician for ICT systems and technology" (2006-07, scientific director), "Advanced technician for the industrialization of the products and the processes" (2006-07), "Advanced technician for communication and multimedia" (2005-06), "Advanced technician for web and e-commerce" (2003-04, chair of the management committee), "Advanced technician for medical informatics" (2003-04), "Advanced technician for web environments in marketing and e-commerce" (2002-03, chair of the management committee), "Advanced technician for e-learning in biomedical environments (ECM)" (2002-03), "Protected internet-working manager" (2001-02), "Advanced technician in foreign languages and specialized in web design and e-commerce" (2001-02, chair of the management committee), "Information and Communication Technician: expert of Intranet/Internet information systems" (2001-02), "Logos - Data warehouse in networked systems" (2000-01)
- Coordinator of the project for the creation of the M.S. Degree (Laurea Specialistica) program in "Information Sciences and Technologies" (in the M.S. Class of Informatics 23/S) at the Università degli Studi di Milano, Italy (2001)

- Education coordinator of the continuous education courses in information and communication technology and office automation for public administrations (1993-2000), organized by Politecnico di Milano for non-ICT personnel of Politecnico di Milano, Prefecture of Milan, Procura della Repubblica presso la Pretura Circondariale di Milano, Ministry of Finance - Tax Department - Lombardy Regional Directorate
- Member of the Permanent Committee of the Faculty of Engineering at Como, Politecnico di Milano, Italy (1997-00)
- Member of the Management Committee of the Continuous Education Center of Politecnico di Milano, Italy (1998-00)
- Member of the Rectoral Committee of Politecnico di Milano for the creation of the Lombardy Inter-University Specialization School for High-School Educators SILSIS (1998)

## 8.5 University services

### *Academic committees*

- In the 4EU+ European University Alliance, Flagship 3 (Transforming science and society: Advancing information, computation and communication): Co-Coordinator (2019-2022) and Main Coordinator (since 2022) for the Università degli Studi di Milano
- Member of the Committee for Mobility and International Programs of the Università degli Studi di Milano, as Delegate of the Department of Computer Science (since 2013)
- Member of the Executive Committee of the Department of Computer Science at the Università degli Studi di Milano (since 2012)
- Delegate for internationalization activities of the Department of Computer Science at the Università degli Studi di Milano (2012-23)
- Erasmus Programs Coordinator for the Department of Computer Science at the Università degli Studi di Milano (2012-23)
- Representative of the Università degli Studi di Milano to the Academic Group of Information Engineering - Gruppo di Ingegneria Informatica GII (since 2002), the committee for the coordination of the Italian professors and researchers in information engineering
- Coordinator of the contract of the Università degli Studi di Milano with the cultural non-profit association Nova Multimedia, for the scientific cooperation in the area of education and the technologies for education, training, continuous education, and cultural dissemination (2008-14)
- Coordinator for the internationalization activities of the Università degli Studi di Milano for Vietnam (2011-12)
- Director of the Department of Information Technology at the Università degli Studi di Milano (2007-12)
- Member of the Committee for the International Initiatives of the Faculty of Mathematical, Physical and Natural Sciences, Università degli Studi di Milano (2003-08)
- Coordinator of the Dual PhD Degree Programs in Computer Science of the Department of Computer Science at the Università degli Studi di Milano (since 2008)
- Director of the Ph.D. Degree Program in Computer Science, Università degli Studi di Milano, Italy (2005-07)
- Member of the Executive Committee of the Department of Information Technology at the Università degli Studi di Milano (2004-07)
- Member of the Scientific Committee of the Lombardy Inter-University Consortium for Automatic Information Processing CILEA, for the service promoting and supporting high-performance computing (2002-04)
- Coordinator of the contract of the Università degli Studi di Milano with Laben S.p.A, Space Software Italia S.p.A, and Quadrics Supercomputers World Ltd (Finmeccanica Group) for the project “Advanced Research Center on Evolutionary Knowledge for Design Innovation by High-Performance Computing”, directed to realize the homonymous research center for studying and developing adaptive and evolutive methodologies based on high-performance computing for industrial innovation (2002-04)
- Chair of Scientific Council of the Center for the Computational Modeling at the Lombardy Inter-University Consortium for Automatic Information Processing CILEA, (2003-04)
- Coordinator of the contract of the Università degli Studi di Milano with Promelit S.p.A., for the scientific cooperation in the area of wireless networks for experimentation in university environments (2003)
- Coordinator of the Area “User Assistance and Office Automation” in the Management Committee of the Electronic Data Processing of the administration of Politecnico di Milano (1995-2000)
- Coordinator of the Office for Information Processing Services at the Como Campus of Politecnico di Milano (1995-2000)
- Member of the Scientific Council of the Center for Computing and Networks at Politecnico di Milano



(1997-2000)

- Coordinator of the Help Service for Computer Systems and Applications directed to the non-ICT personnel of Politecnico di Milano (1993-96)
- Member of the Executive Committee of the Department of Electronics and Information at the Politecnico di Milano (1993-96)
- Member of the Rectoral Committee for the Information Processing Services of the Politecnico di Milano (1995-96)

#### *Academic examination committees*

- Certified as possible member of the Evaluation Committee for the Italian National Certification of Academic Educational Programs for the scientific sector ING-INF/05 Information Processing Systems: 2013 call for applications ANVUR Board of Directors motion No. 11, 30/1/2013 (2013)
- Member of the Comparative Evaluation Committee for positions as research assistant in the scientific sector ING-INF/05 Information Processing Systems: competition established at Università degli Studi di Firenze, by the Rectoral Decree No. 1205/2012, published in the web site of the university on 18/12/2012, and appointed to the committee by Rectoral Decree prot. No. 220, 22/2/2013 (2013)
- Certified as possible member of the Evaluation Committee for the Italian National Scientific Certification for the scientific sector ING-INF/05 Information Processing Systems: 2013 call for applications MIUR Director Decree No. 161, 28/1/2013 (2013)
- Member of the Comparative Evaluation Committee for positions as research assistant in the scientific sector ING-INF/05 Information Processing Systems: competition established at Politecnico di Torino, by the Rectoral Decree No. 366, published in the web site of the university on 30/09/2010, and appointed to the committee by Rectoral Decree prot. No. 88, 28/03/2011 (2011)
- Member of the Comparative Evaluation Committee for positions as research assistant in the scientific sector ING-INF/05 Information Processing Systems: competition established at Università Telematica Internazionale, by the Rectoral Decree No. 3/2009, published in the web site of the university on 27/3/2009, and appointed to the committee by Rectoral Decree prot. No. 10, 8/10/2009 (2009)
- Member of the Comparative Evaluation Committee for positions as full professors in the scientific sector ING-INF/05 Information Processing Systems: competition established at Politecnico di Milano, by the Rectoral Decree No. 12, 23/03/2004, published in the Official Gazette of the Italian Republic No. 28 - 4th special series, 07/09/2004, and appointed to the committee by Rectoral Decree prot. No. 3284, 22.10.2004 (2004-05)
- Member of the Evaluation Committee for the Final Exam of Ph.D. Degree Programs: Ph.D. Degree Program in Engineering for Environment and Landscape (XVII Cycle) at Politecnico di Bari (2005), Ph.D. Degree Program in Computer Science (XVII Cycle) at the Università degli Studi di Milano (2005), Ph.D. Degree Program in Information and Automation Engineering at Politecnico di Milano (2001)
- Member of the Evaluation Committee for the Admission Exam of the Ph.D. Degree Program in Computer Science at the Università degli Studi di Milano: XXV Cycle (2009), XX Cycle (2004)

## **8.6 Scientific associations**

#### *Technical committees of international scientific associations*

- IFIP WG 11.3 Data and Application Security and Privacy (member)
- Emerging Technical Committee on Internet of Things of the IEEE Communications Society (since 2013, member)
- Technical Subcommittee on Green Communications and Computing of the IEEE Communications Society (since 2013, member)
- Technical Committee on Communications and Information Security of the IEEE Communications Society (since 2012, member)
- Technical Committee on Monitoring Critical Infrastructures of the IEEE Systems Council (since 2010, member)
- Technical Committee on Security and Privacy in Complex Information Systems of the IEEE Systems Council (since 2010, member)
- Technical Committee on Security and Contraband Detection of the IEEE Instrumentation and Measurement Society (since 2002, founding co-chair)
- Technical Committee on Emergent Technologies of the IEEE Instrumentation and Measurement Society (1994-2013, founding co-chair)
- Technical Steering Committee on Neural Networks of the IMACS association (since 1994, member)

- Technical Steering Committee on Computer Arithmetic of the IMACS association (since 1994, member)
- Task Force on Virtual Reality of the Technical Committee on Intelligent System Applications of the IEEE Computational Intelligence Society (2008-10, member)
- IEEE TAB NTDC Technical Committee on Biometrics (2005-08, vice chair)
- IEEE TAB NTDC Technical Committee on Brain-Computer Interface (2006-08, member)
- Technical Activity Committee on Defect Tolerance of the IEEE Computer Society Test Technology Technical Committee (1995-2006, co-chair)
- Standards Committee of the IEEE Computational Intelligence Society (2005, member)
- Technical Committee on Emerging Technologies of the IEEE Neural Networks Society (2003-05, member)
- Working Group on Homeland Security of the IEEE Computational Intelligence Society Technical Committee on Intelligent System Applications (2003-05, founding co-chair)
- Technical Committee on Intelligent Measurement Systems of the IEEE Instrumentation and Measurement Society (1997-2002, founding co-chair)

*Conference coordination committees of international scientific associations*

- Conference Committee of the IEEE Computational Intelligence Society (2008-09, 2004-05; member)
- Conference Committee of the IEEE Neural Network Council/Society (2003, 2001, 2000; member)
- Technical Meetings Review Committee of the Technical Committee on Test Technologies of the IEEE Computer Society (2000, member)

*Publication coordination committees of international scientific associations*

- IEEE Publication Services and Products Board (2013, member)
- IEEE PSPB Strategic Planning Committee (2013, 2009-11, member)
- IEEE TAB/PSPB Products & Services Committee (2013, 2008-09, 2005-06, member)
- IEEE PSPB Nominations and Appointments Committee (2013, member)
- Vice-President for Publications of the IEEE Systems Council (2008-11)
- IEEE Systems Council Publications Committee (2008-11, chair)
- Publications Committee of the IEEE Computational Intelligence Society (2008, member)
- Working Group 2 “Practical Content” of the IEEE PSPB strategic planning experiments (2006, member)
- Vice-President for Publications of the IEEE Instrumentation and Measurement Society (2002-04)
- IEEE Instrumentation and Measurement Society Publications Committee (2002-04, chair)

*Educational coordination committees of international scientific associations*

- IEEE Biometrics Certification Committee (2008-13; chair)
- Vice President for Education of the IEEE Biometrics Council (2008-09)
- IEEE Biometrics Council Education Committee (2008-09, chair)
- IEEE EAB/SA Standards Education Committee (2008; member)
- Liaison of the IEEE Educational Activity Board to the IEEE TAB PSPB Product and Services Committee (2008)

*Member services coordination committees of international scientific associations*

- Meritorious Service Award Sub-Committee of the IEEE Computational Intelligence Society (2012-13, member)
- History Sub-Committee of the IEEE Computational Intelligence Society (2008, member)
- IEEE RAB Transnational Committee (2005, member)
- Vice-President for Members Activities of the IEEE Neural Networks Society (2003-04)
- IEEE Neural Networks Society Members Activities Committee (2003-04, chair)
- Women in Computational Intelligence Committee of the IEEE Computational Intelligence Society (2004-05, member)
- IEEE Student Branch at Politecnico di Milano (1993-2004, counselor)

*Coordination and management committees of international scientific associations*

- IEEE Region 8 Director (2023-24)
- IEEE Board of Directors (2023-24, 2015, 2010-12, member)
- IEEE Board of Directors Coordinator for the IEEE European Public Policy Committee (2024)
- Past-President of the IEEE Systems Council (2022)
- IEEE Region 8 Director-elect (2021-22)
- President of the IEEE Systems Council (2020-21)

- President-Elect of the IEEE Systems Council (2019)
- IEEE Past Vice President for Technical Activities (2016)
- IEEE Vice President for Technical Activities (2015)
- IEEE Nominations and Appointments Committee (2014, member)
- IEEE Strategic Planning AdHoc Committee (2014, member)
- IEEE Vice President-elect for Technical Activities (2014)
- IEEE TAB Presidents' Forum (2014, chair)
- IEEE TAB Management Committee (2014, member)
- IEEE TAB Nominations and Appointments Committee (2014, chair)
- IEEE TAB-SPC Global Perspectives Ad-Hoc Committee (2014, chair; 2013, member)
- IEEE TAB Biometrics Council Steering Committee (2013-14, member)
- IEEE TAB Strategic Planning Committee (2011-14, member)
- IEEE TAB-SPC Subcommittee on Community Initiation (2013, chair)
- IEEE TAB Conflict Resolution Committee (2013, member)
- IEEE Public Visibility Committee (2012-13, member)
- IEEE Brand Ambassadors Program (2012, speaker)
- IEEE Director - Division X Director (2010-12)
- IEEE Technical Activities Board (2010-12, 2006-07; member)
- IEEE Assembly (2010-12, member)
- IEEE Division X Delegate (2010-12)
- IEEE TAB Ethics and Conflict Resolution Committee (2011-12, member)
- Finance Committee of the IEEE Computational Intelligence Society (2012-13, 2008-09, member)
- IEEE Division X Nominations Committee (2005, member; 2011, chair)
- IEEE PSPB Nominations and Appointments Committee (2010-11, member)
- IEEE Systems Council Administrative Committee (2008-11, member)
- IEEE Biometrics Council Administrative Committee (2008-09, member)
- Constitution and Bylaws Committee of the IEEE Computational Intelligence Society (2008-09, chair; 2013, member)
- Nominations Committee of the IEEE Computational Intelligence Society (2008-09, chair)
- Past-President of the IEEE Computational Intelligence Society (2008-09)
- IEEE Computational Intelligence Society Administrative Committee (2005-08, member)
- President of the IEEE Computational Intelligence Society (2006-07)
- President-Elect of the IEEE Computational Intelligence Society (2005)
- IEEE Instrumentation and Measurement Society Administrative Committee (1998-2005, member)
- Nomination and Appointment Committee of the IEEE Neural Networks Society (2004, member)
- IEEE Neural Networks Society Administrative Committee (2003-04, member)
- IEEE Neural Networks Council Administrative Committee (2002, member)

*Award committees of international scientific associations*

- IEEE Frank Rosenblatt Award Committee (2013, 2009, 2005, member; 2014, 2006-08, chair)
- IEEE TAB Hall of Honor Selection Committee (2013, member)
- IEEE Systems Council Fellow Evaluation Committee (2013, member)
- Fred Castro Lifetime Achievement Award of the Web Education Foundation (2013, member)
- IEEE Technical Field Awards Council Committee (2006-08, member)
- IEEE Joseph F. Keithley Award Committee (2002-04, member)

*National scientific associations*

- Scientific Council of the Italian Society for Neural Networks SIREN (since 2009, 2000-04; member)
- IEEE Systems Council Italy Chapter (2008-09, founding chair)
- IEEE Biometrics Council Italy Chapter (2009, founding chair)
- Executive Council of the Specialistic Group "Information Technology and Applications" of the Associazione Elettrotecnica ed Elettronica Italiana (AEI) (2001-03, member)
- North-Italy Chapter of the IEEE Instrumentation and Measurement Society (1993-2000, secretary)
- North-Italy Chapter of the IEEE Computer Society (1991-2000, secretary)
- Representative of the Associazione Elettrotecnica ed Elettronica Italiana (AEI) to Politecnico di Milano (1990-2000)
- General Council of the Associazione Elettrotecnica ed Elettronica Italiana (AEI) (1998-99, member)
- Associazione Elettrotecnica ed Elettronica Italiana (AEI) - Milano Section (1995-97, secretary)

- Associazione Elettrotecnica ed Elettronica Italiana (AEI) - Milano Section (1992-95, vice secretary)

## 9 Publications

### 9.1 Research books and chapters in books published by international publishers with scientific editorial board

- BC-1 O. Vermesan, V. Piuri, F. Scotti, A. Genovese, R. Donida Labati, P. Coscia, “Explainability and Interpretability Concepts for Edge AI Systems”, in *Advancing Edge Artificial Intelligence: System Contexts*, O. Vermesan, D. Marples (eds.), River Publishers, pp. 197-227, 2023.
- BC-2 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “Touchless Palmprint and Fingerprint Recognition”, in *Advances in Computing, Informatics, Networking and Cybersecurity – A Book Honoring Prof. Mohammad S. Obaidat’s Significant Scientific Contributions*, P. Nicopolitidis, S. Mistra, L. Yang, B. Zeigler, and Z. Ning (eds.), Springer-Nature, 2022, pp. 1-30.
- BC-3 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, and S. Vishwakarma, “Computational Intelligence in Cloud Computing”, in *Recent Advances in Intelligent Engineering*, L. Kovács, T. Haidegger, and A. Szakál (eds.), Springer, Cham, 2020, pp. 111-127. ISBN: 978-3-030-14350-3. [DOI: 10.1007/978-3-030-14350-3\_6].
- BC-4 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “A Scheme for Fingerphoto Recognition in Smartphones”, in *Selfie Biometrics – Advances and Challenges*, A. Rattani, R. Derakhshani, A. Ross (eds.), Springer International Publishing, 2019, pp. 1-18. ISBN: 978-3-030-26972-2. [DOI: 10.1007/978-3-030-26972-2\_3].
- BC-5 A. Genovese, E. Muñoz, V. Piuri, F. Scotti, “Advanced Biometric Technologies: Emerging Scenarios and Research tTends”, in *From Database to Cyber Security: Essays Dedicated to Sushil Jajodia on the Occasion of His 70th Birthday*, P. Samarati, I. Ray, I. Ray (eds.), Springer International Publishing, Cham, 2018, pp. 324-352. ISBN: 978-3-030-04834-1. [DOI: 10.1007/978-3-030-04834-1\_17].
- BC-6 S. De Capitani di Vimercati, S. Foresti, G. Livraga, V. Piuri, P. Samarati, “Supporting Users in Cloud Plan Selection”, in *From Database to Cyber Security: Essays Dedicated to Sushil Jajodia on the Occasion of His 70th Birthday*, P. Samarati, I. Ray, I. Ray (eds.), Springer International Publishing, Cham, pp. 244-260, 2018. ISBN: 978-3-030-04834-1. [DOI: 10.1007/978-3-030-04834-1\_13].
- BC-7 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, “Applications of Computational Intelligence in Industrial and Environmental Scenarios”, in *Learning Systems: from Theory to Practice*, V. Sgurev, V. Piuri, V. Jotsov (eds.), Springer, Cham, pp. 29-46, 2018. ISBN: 978-3-319-75180-1. [DOI: 10.1007/978-3-319-75181-8\_2].
- BC-8 A. Dineva, J.K. Tar, A. Varkonyi-Koczy, J.T. Toth, V. Piuri, “Non-Conventional Control Design by Sigmoid Generated Fixed Point Transformation Using Fuzzy Approximation”, in *Practical Issues of Intelligent Innovation*, V. Sgurev, V. Jotsov, J. Kacprzyk (eds.), Springer, Cham, pp. 1-15, 2018. ISBN: 978-3-319-78437-3. [DOI: 10.1007/978-3-319-78437-3\_1].
- BC-9 R. Donida Labati, V. Piuri, F. Scotti, *Touchless Fingerprint Biometrics*, CRC Press, August 2015. ISBN: 9781498707619.
- BC-10 A. Genovese, V. Piuri, F. Scotti, “Touchless Palmprint Recognition Systems”, S. Jajodia (ed.), Springer, September 2014. ISBN: 978-3-319-10365-5. [DOI: 10.1007/978-3-319-10365-5].
- BC-11 R. Jhawar, V. Piuri, “Dependability-Oriented Resource Management Schemes for Cloud Computing Data Centers”, in *Handbook on Data Centers*, A.Y. Zomaya, S.U. Khan (eds.), Springer, 2014.
- BC-12 M. Albanese, S. Jajodia, R. Jhawar, V. Piuri, “Securing Mission-Centric Operations in the Cloud”, in *Secure Cloud Computing*, S. Jajodia, K. Kant, P. Samarati, V. Swarup, C. Wang (eds.), Springer, 2014. ISBN: 978-1-4614-9277-1.
- BC-13 F. Bellocchio, N.A. Borghese, S. Ferrari, V. Piuri, *3D Surface Reconstruction: Multi-Scale Hierarchical Approaches*, Springer, 2013. ISBN: 978-1-4614-5631-5.
- BC-14 A. Amato, V. Di Lecce, V. Piuri, *Semantic Analysis and Understanding of Human Behavior in Video Streaming*, Springer, 2013. ISBN: 978-1-461-45485-4.
- BC-15 S. De Capitani di Vimercati, A. Genovese, G. Livraga, V. Piuri, F. Scotti, “Privacy and Security in Environmental Monitoring Systems: Issues and Solutions”, in *Computer and Information Security Handbook, 2nd Edition*, J. Vacca (ed.), Morgan Kaufmann, pp. 835-853, 2013. ISBN: 978-0-1239-4397-2.

- BC-16 R. Jhawar, V. Piuri, “Fault Tolerance and Resilience in Cloud Computing Environments”, in *Computer and Information Security Handbook, 2nd Edition*, J. Vacca (ed.), Morgan Kaufmann, pp. 125-141, 2013. ISBN: 978-0-1239-4397-2.
- BC-17 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “Iris Segmentation: State of the Art and Innovative Methods”, in *Cross Disciplinary Biometric Systems*, C. Liu, V.K. Mago (eds.), Springer, pp. 151-182, 2012. ISBN: 978-3-642-28457-1. [DOI: 10.1007/978-3-642-28457-1\_8]
- BC-18 R. Donida Labati, V. Piuri, F. Scotti, “Biometric Privacy Protection: Guidelines and Technologies”, in *Communications in Computer and Information Science*, M. S. Obaidat, J.S. Sevillano, F. Joaquim (eds.), Springer, pp. 3-19, 2012. ISBN: 978-3-642-35754-1. [DOI: 10.1007/978-3-642-35755-8\_1]
- BC-19 S. Cimato, M. Gamassi, V. Piuri, R. Sassi, F. Scotti, “Privacy in biometrics”, in *Biometrics: theory, methods, and applications*, N.V. Boulgouris, K.N. Plataniotis, E. Micheli-Tzanakou (eds.), Wiley-IEEE Press, pp. 633-654, 2009. ISBN: 978-0-470-24782-2.
- BC-20 A. Ferrante, S. Chandra, V. Piuri, “IPSec database query acceleration”, in *E-business and telecommunications*, J. Filipe, M.S. Obaidat (eds.), Springer, pp. 188-200, 2008. ISBN: 978-3-540-88652-5. [DOI: 10.1007/978-3-540-88653-2\_14]
- BC-21 S. Cimato, M. Gamassi, V. Piuri, R. Sassi, F. Scotti, “Privacy Issues in Biometric Identification”, in *Touch Briefings*, Business Briefings Ltd, pp. 40-42, 2006. ISBN: 1-905-05296-0.
- BC-22 C. Alippi, V. Piuri, F. Scotti, “High-level Design of Composite Systems”, in *Soft computing in software engineering: theory and applications*, E. Damiani, L.C. Jain, M.Madravio (eds.), Springer, pp. 183-220, 2004. ISBN: 3-540-22030-5.
- BC-23 S. Ferrari, V. Piuri, “Neural Networks in Intelligent Sensors and Measurement Systems for Industrial Applications”, in *Neural networks for instrumentation, measurement, and related industrial applications*, S. Ablameyko, L. Goras, M. Gori, V. Piuri (eds.), IOS Press, pp. 19-42, 2003. ISBN: 1-586-03303-4.
- BC-24 V. Piuri, S. Ablameyko, “Introduction to Neural Networks for Instrumentation, Measurement, and Industrial Applications”, in *Neural networks for instrumentation, measurement and related industrial applications*, S. Ablameyko, L. Goras, M. Gori, V. Piuri (eds.), IOS Press, pp. 1-7, 2003. ISBN: 1-586-03303-4.
- BC-25 D. D’Amore, V. Piuri, “Behavioral Simulation of Neural Networks: An Approach based upon SPICE”, in *Network models for control and processing*, M. Fraser (ed.), Intellect, pp. 109-142, 2000. ISBN: 978-1-841-50006-5.
- BC-26 C. Alippi, V. Piuri, “Neural Networks for Identification, Control, Robotics, Signal and Image Processing”, in *Encyclopedia of computer science and technology*, A. Kent, J. Williams (eds.), Marcel Dekker, New York, pp. 171-193, 1998. ISBN: 0-824-72292-2.
- BC-27 A. Ferrero, V. Piuri, “Soft-Computing and Virtual Environment-based Applications”, in *Instrumentation and measurement technology and applications*, E.M. Petriu (ed.), IEEE Press, pp. 453-457, 1998. ISBN: 0-780-34268-2.
- BC-28 S. Wang, V. Piuri, “A Unified View of CORDIC Processor Design”, in *Application specific processors*, E.E. Swartzlander Jr. (ed.), Kluwer, pp. 121-160, 1997. ISBN: 0-792-39792-4.
- BC-29 V. Piuri, “FAPES: An Expert System for Designing and Optimising Fault-Tolerant Arithmetic Array Processors”, in *Robotic systems and AMT*, G. Halevi, R. Weill, I. Yudilevich (eds.), Elsevier, pp. 267-278, 1990. ISBN: 0-444-88828-4.

## 9.2 Refereed international journals articles

- IJ-1 J. Liao, Y. Zhai, Q. Wang, B. Sun, V. Piuri, “LDCL: Low-Confidence Discriminant Contrastive Learning for Small-Sample SAR ATR”, in *IEEE Transactions on Geoscience and Remote Sensing*, pp. 1-17, 2024. ISSN: 0196-2892. [DOI: 10.1109/TGRS.2024.3350196]
- IJ-2 B. Bajic, A. Rikalovic, N. Suzic, V. Piuri, “Toward a Human-Cyber-Physical System for Real-Time Anomaly Detection”, in *IEEE Systems Journal*, pp. 1308-1319, 2024. ISSN: 1932-8184. [DOI: 10.1109/jsyst.2024.3402978]

- IJ-3 A. Genovese, V. Piuri, F. Scotti, “A Decision Support System for Acute Lymphoblastic Leukemia Detection based on Explainable Artificial Intelligence”, in *Image and Vision Computing*, pp. 1-14, November 2024. ISSN: 0262-8856. [DOI: 10.1016/j.imavis.2024.105298]
- IJ-4 Y. Zhai, J. Pan, H. Zhang, T. Xian, Y. Xu, P. Coscia, A. Genovese, V. Piuri, F. Scotti, C. L. P. Chen, “Efficient Adjacent Feature Harmonizer Network with UAV-CD+ Dataset for Remote Sensing Change Detection”, in *IEEE Trans. on Geoscience and Remote Sensing*, pp. 1-18, November 2024. ISSN: 1558-0644. [DOI: 10.1109/TGRS.2024.3502768]
- IJ-5 Z. Ying, T. Xian, Y. Zhai, X. Jia, H. Zhang, J. Pan, P. Coscia, A. Genovese, V. Piuri, F. Scotti, “DS-HyFA-Net: A Deeply Supervised Hybrid Feature Aggregation Network with Multi-Encoders for Change Detection in High-Resolution Imagery”, in *IEEE Trans. on Geoscience and Remote Sensing*, pp. 1-17, October 2024. ISSN: 1558-0644. [DOI: 10.1109/TGRS.2024.3471075]
- IJ-6 Y. Xu, Z. Liang, Y. Liang, X. Li, W. Pan, J. You, Z. Long, Y. Zhai, A. Genovese, V. Piuri, F. Scotti, “Data-Driven Container Marking Detection and Recognition System with an Open Large-Scale Scene Text Dataset”, in *IEEE Trans. on Emerging Topics in Computational Intelligence*, pp. 3368-3381, October 2024. ISSN: 2471-285X. [DOI: 10.1109/TETCI.2024.3377680]
- IJ-7 Z. Ying, J. Zhou, Y. Zhai, H. Quan, W. Li, A. Genovese, V. Piuri, F. Scotti, “Large-Scale High-Altitude UAV-based Vdetection via Pyramid Dual Pooling Attention Path Aggregation Network”, in *IEEE Trans. on Intelligent Transportation Systems*, pp. 14426-14444, October 2024. ISSN: 1558-0016. [DOI: 10.1109/TITS.2024.3396915]
- IJ-8 M. B. Anley, A. Genovese, D. Agostinello, V. Piuri, “Robust DDoS Attack Detection with Adaptive Transfer Learning”, in *Computers & Security*, pp. 1-10, September 2024. ISSN: 0167-4048. [DOI: 10.1016/j.cose.2024.103962]
- IJ-9 C. Dong, C. Wang, Y. Zhai, Y. Li, J. Zhou, P. Coscia, A. Genovese, V. Piuri, F. Scotti, “GMTNet: Dense Object Detection via Global Dynamically Matching Transformer Network”, in *IEEE Trans. on Circuits and Systems for Video Technology*, pp. 1-14, 2024. ISSN: 1558-2205. [DOI: 10.1109/TCSVT.2024.3522661]
- IJ-10 C. Mai, Y. Wu, Y. Zhai, H. Quan, J. Zhou, A. Genovese, V. Piuri, F. Scotti, “DBCG-Net: Dual Branch Calibration Guided Deep Network for UAV Images Semantic Segmentation”, in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, pp. 7932-7945, 2024. ISSN: 2151-1535. [DOI: 10.1109/JSTARS.2024.3378695]
- IJ-11 Z. Ying, Z. Tan, Y. Zhai, X. Jia, W. Li, J. Zeng, A. Genovese, V. Piuri, F. Scotti, “DGMA2-Net: A Difference-guided Multiscale Aggregation Attention Network for Remote Sensing Change detection”, in *IEEE Transactions on Geoscience and Remote Sensing*, pp. 1-16, 2024. ISSN: 1558-0644. [DOI: 10.1109/TGRS.2024.3390206]
- IJ-12 C. Chen, B. Moriarty, S. Hu, S. Moran, M. Pistoia, V. Piuri, P. Samarati, “Model-Agnostic Utility-Preserving Biometric Information Anonymization”, in *International Journal of Information Security*, 2024. ISSN: 1615-5270. [DOI: 10.1007/s10207-024-00862-8]
- IJ-13 Z. Jiang, Y. Zhai, F. Ke, J. Zhou, A. Genovese, V. Piuri, F. Scotti, “Learning to Count Arbitrary Industrial Manufacturing Workpieces”, in *IEEE Transactions on Industrial Informatics*, pp. 1-13, 2024. ISSN: 1941-0050. [DOI: 10.1109/TII.2024.3363063]
- IJ-14 C. Pino, A. Sitta, G. Castagnolo, A.A. Messina, S. Coffa, M. Calabretta, F. Scotti, A. Genovese, V. Piuri, C. Spampinato, F. Rundo, “Intelligent Traction Inverter in Next Generation Electric Vehicles: The Health Monitoring of Silicon-Carbide Power Modules”, in *IEEE Transactions on Intelligent Vehicles*, pp. 4734-4753, December, 2023. ISSN: 2379-8904. [DOI: 10.1109/TIV.2023.3294726]
- IJ-15 P. Montuschi, Y. Chan, V. Piuri, “In-Memory Computing: The Emerging Computing Topic in the Post-von Neumann Era”, in *Computer*, pp. 4-6, October, 2023, ISSN: 0018-9162. [DOI: 10.1109/MC.2023.3295610]
- IJ-16 T. Wang, Z. Li, Y. Xu, J. Chen, A. Genovese, V. Piuri, F. Scotti, “Few-Shot Steel Surface Defect Recognition via Self-Supervised Teacher-Student Model with Min-Max Instances Similarity”, in *IEEE Transactions on Instrumentation and Measurement*, pp. 1-16, September, 2023. ISSN: 1557-9662. [DOI: 10.1109/TIM.2023.3315404]

- IJ-17 C. Qin, B. Zheng, J. Zeng, Z. Chen, Y. Zhai, A. Genovese, V. Piuri, F. Scotti, “Dynamically Aggregating MLPs and CNNs for Skin Lesion Segmentation with Geometry Regularization”, in *Computer Methods and Programs in Biomedicine*, pp. 1-20, August, 2023. ISSN: 0169-2607. [DOI: 10.1016/j.cmpb.2023.107601]
- IJ-18 Y. Xu, J. Chen, Y. Liang, Y. Zhai, Z. Ying, W. Zhou, A. Genovese, V. Piuri, F. Scotti, “Flexible and Diverse Contrastive Learning for Steel Surface Defect Recognition with Few Labeled Samples”, in *IEEE Transactions on Instrumentation and Measurement*, pp. 1-14, June, 2023. ISSN: 1557-9662. [DOI: 10.1109/TIM.2023.3249221]
- IJ-19 Y. Zhai, J. Liao, B. Sun, Z. Jiang, Z. Ying, W. Wang, A. Genovese, V. Piuri, F. Scotti, “Dual Consistency Alignment Based Self-Supervised Learning for SAR Target Recognition Speckle Noise Resistance”, in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, pp. 3915-3928, April, 2023. ISSN: 2151-1535. [DOI: 10.1109/JSTARS.2023.3267824]
- IJ-20 O. Lazzez, A.M. Qahtani, A. Alsufyani, O. Almutiry, H. Dhahri, V. Piuri, A.M. Alimi, “DeepVisInterests: Deep Data Analysis for Topics of Interest Prediction”, in *Multimedia Tools and Applications*, pp. 40913-40936, April, 2023. [DOI: 10.1007/S11042-023-14806-2]
- IJ-21 J. Wong, V. Piuri, F. Scotti, Q. Zhang, “Efficient IoT Big Data Streaming with Deep Learning-enabled Dynamics”, in *IEEE Internet of Things Journal*, pp. 4770-4782, March, 2023. [DOI: 10.1109/JIOT.2022.3221080]
- IJ-22 A. Genovese, V. Piuri, K.N. Plataniotis, F. Scotti, “DL4ALL: Multi-Task Cross-Dataset Transfer Learning for Acute Lymphoblastic Leukemia Detection”, in *IEEE Access*, pp. 65222-65237, 2023. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2023.3289219]
- IJ-23 R. Donida Labati, V. Piuri, F. Rundo, F. Scotti, “MultiCardioNet: Interoperability Between ECG and PPG Biometrics”, in *Pattern Recognition Letters*, pp. 1-7, 2023. ISSN: 0167-8655. [DOI: 10.1016/j.patrec.2023.09.009]
- IJ-24 Y. Xu, Q. Ke, Z. Jiang, Y. Zhai, A. Genovese, V. Piuri, F. Scotti, “Antenna Parameter Measurement Network with Dual Attention and Focus Loss Using UAV”, in *IEEE Transactions on Artificial Intelligence*, pp. 1-12, 2023. ISSN: 2691-4581. [DOI: 10.1109/TAI.2023.3297991]
- IJ-25 R. Donida Labati, V. Piuri, F. Rundo, F. Scotti, “Photoplethysmographic Biometrics: A Comprehensive Survey”, in *Pattern Recognition Letters*, pp. 11-125, April, 2022. ISSN: 0167-8655. [DOI: 10.1016/j.patrec.2022.03.006]
- IJ-26 Y. Liang, J. Chen, W. Zhou, X. Ying, Y. Zhai, R. Donida Labati, V. Piuri, F. Scotti, “Weakly Contrastive Learning via Batch Instance Discrimination and Feature Clustering for Small Sample SAR ATR,” in *IEEE Transactions on Geoscience and Remote Sensing*, pp. 1-17, 2022. ISSN: 0196-2892. [DOI: 10.1109/TGRS.2021.3066195]
- IJ-27 Y. Liang, J. Chen, W. Zhou, Y. Xu, Y. Zhai, R. Donida Labati, V. Piuri, F. Scotti, “Instance Contrastive Learning with Dynamic Weighted Variance for Small Sample Steel Defect Recognition”, in *Electronics Letters*, vol. 58, n. 2, pp. 50-52, January 2022. ISSN: 0013-5194. [DOI: 10.1049/ell2.12361].
- IJ-28 Y. Zhai, Z. Jiang, C. Mai, J. Liao, W. Wang, J. Zeng, C. Qin, R. Donida Labati, V. Piuri, F. Scotti, “A3PNet: Antijam and Accurate Antenna Parameters Measuring Network for Mobile Communication Base Station Using UAV”, in *IEEE Transactions on Instrumentation and Measurement*, pp. 1-15, 2022. ISSN: 0018-9456. [DOI: 10.1109/TIM.2022.3156960]
- IJ-29 M. Abukmeil, S. Ferrari, A. Genovese, V. Piuri, F. Scotti, “A Survey of Unsupervised Generative Models for Exploratory Data Analysis and Representation Learning”, in *ACM Computing Surveys*, vol. 54, no. 5, pp. 1-40, June 2021. ISSN: 0360-0300. [DOI: 10.1145/3450963].
- IJ-30 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, S. Vishwakarma, “I-SOCIAL-DB: A Labeled Database of Images Collected from Websites and Social Media for Iris Recognition”, in *Image and Vision Computing*, vol. 105, 2021. ISSN: 0262-8856. [DOI: 10.1016/j.imavis.2020.104058].
- IJ-31 T. Wang, N. Tan, J. Qiu, Y. Yu, X. Zhang, Y. Zhai, R. Donida Labati, V. Piuri, F. Scotti, “Global-Equivalent Sliding Mode Control Method for Bridge Crane”, in *IEEE Access*, vol. 9, pp. 160372-160382, September 2021. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2021.3115164].



- IJ-32 T. Wang, N. Tan, X. Zhang, G. Li, S. Su, J. Zhou, J. Qiu, Z. Wu, Y. Zhai, R. Donida Labati, V. Piuri, F. Scotti, "A Time-Varying Sliding Mode Control Method for Distributed-Mass Double Pendulum Bridge Crane with Variable Parameters", in *IEEE Access*, vol. 9, pp. 75981-75992, May 2021. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2021.3079303].
- IJ-33 D. Braga, A. Madureira, F. Scotti, V. Piuri, A. Abraham, "An Intelligent Monitoring System for Assessing Bee Hive Health," in *IEEE Access*, Vol. 9, pp. 89009-89019, 2021. [DOI: 10.1109/ACCESS.2021.3089538]
- IJ-34 Y. Zhai, Q. Ke, X. Liu, W. Zhou, Y. Xu, Z. Ying, J. Gan, J. Zeng, R. Donida Labati, V. Piuri, F. Scotti, "AntennaNet: Antenna Parameters Measuring Network for Mobile Communication Base Station using UAV", in *IEEE Transactions on Instrumentation and Measurement*, vol. 70, pp. 1-17, February 2021. ISSN: 0018-9456. [DOI: 10.1109/TIM.2021.3058980].
- IJ-35 J. Zeng, B. Zhu, Y. Huang, C. Qin, J. Zhu, F. Wang, Y. Zhai, J. Gan, Y. Chen, Y. Wang, R. Donida Labati, V. Piuri, F. Scotti, "Real-time Segmentation Method of Lightweight Network for Finger Vein Using Embedded Terminal Technique", in *IEEE Access*, vol. 9, pp. 303-316, 2021. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2020.3046108].
- IJ-36 M. Barni, R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Iris Deidentification with High Visual Realism for Privacy Protection on Websites and Social Networks", in *IEEE Access*, pp. 131995-132010, 2021. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2021.3114588]
- IJ-37 S.C. Mukhopadhyay, S.K.S. Tyagi, N.K. Suryadevara, V. Piuri, F. Scotti, S. Zeadally, "Artificial Intelligence-based Sensors for Next Generation IoT Applications: A Review," in *IEEE Sensors Journal*, Vol. 21, pp. 24920-24932, 2021. [DOI: 10.1109/JSEN.2021.3055618]
- IJ-38 Y. Zhai, C. Yu, C. Qin, W. Zhou, Q. Ke, J. Gan, R. Donida Labati, V. Piuri, F. Scotti, "Facial Beauty Prediction via Local Feature Fusion and Broad Learning System ", in *IEEE Access*, vol. 8, pp. 218444-218457, October 2020. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2020.30325157].
- IJ-39 Y. Xu, J. Liu, Y. Zhai, J. Gan, J. Zeng, H. Cao, F. Scotti, V. Piuri, R. Donida Labati, "Weakly Supervised Facial Expression Recognition via Transferred DAL-CNN and Active Incremental Learning", in *Soft Computing*, vol. 24, n. 8, pp. 5971-5985, April 2020. ISSN: 1432-7643. [DOI: 10.1007/s00500-019-04530-1].
- IJ-40 Y. Zhai, Y. Huang, Y. Xu, J. Gan, H. Cao, W. Deng, R. Donida Labati, V. Piuri, F. Scotti, "Asian Female Facial Beauty Prediction using Deep Neural Networks via Transfer Learning and Multi-Channel Feature Fusion", in *IEEE Access*, vol. 8, pp. 56892-56907, March 2020. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2020.2980248].
- IJ-41 J. Zeng, F. Wang, J. Deng, C. Qin, Y. Zhai, J. Gan, V. Piuri, "Finger Vein Verification Algorithm based on Fully Convolutional Neural Network and Conditional Random Field", in *IEEE Access*, IEEE, pp. 65402-65419, 2020. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2020.2984711]
- IJ-42 B. Bajic, A. Rikalovic, N. Suzic, V. Piuri, "Industry 4.0 Implementation Challenges and Opportunities: A Managerial Perspective", in *IEEE Systems Journal*, IEEE, pp. 1-14, 2020. ISSN: 1937-9234. [DOI: 10.1109/JSYST.2020.3023041]
- IJ-43 J. Gan, F. Scotti, L. Xiang, Y. Zhai, C. Mai, G. He, J. Zeng, Z. Bai, R. Donida Labati, V. Piuri, "2M BeautyNet: Facial Beauty Prediction based on Multi-Task Transfer Learning", in *IEEE Access*, vol. 8, pp. 20245-20256, January 2020. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2020.2968837].
- IJ-44 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, G. Sforza, "A Decision Support System for Wind Power Production", in *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 50, n. 1, pp. 290-304, January 2020. ISSN: 2168-2216. [DOI: 10.1109/TSMC.2017.2783681].
- IJ-45 S. De Capitani di Vimercati, S. Foresti, G. Livraga, V. Piuri, P. Samarati, "A Fuzzy-based Brokering Service for Cloud Plan Selection", in *IEEE Systems Journal*, pp. 4101-4109, December, 2019. ISSN: 1937-9234. [DOI: 10.1109/JSYST.2019.2893212]
- IJ-46 A. Genovese, V. Piuri, K. N. Plataniotis, F. Scotti, "PalmNet: Gabor-PCA Convolutional Networks for Touchless Palmprint Recognition", in *IEEE Trans. on Information Forensics and Security*, vol. 14, no. 2, December 2019, pp. 3160-3174. ISSN: 1556-6013. [DOI: 10.1109/TIFS.2019.2911165].

- IJ-47 R. Donida Labati, A. Genovese, E. Muñoz, A. Ross, V. Piuri, F. Scotti, “Non-ideal Iris Segmentation using Polar Spline RANSAC and Illumination Compensation”, in *Computer Vision and Image Understanding*, vol. 188, November 2019. ISSN: 1077-3142. [DOI: 10.1016/j.cviu.2019.07.007].
- IJ-48 R. Donida Labati, E. Muñoz, V. Piuri, R. Sassi, F. Scotti, “Deep-ECG: Convolutional Neural Networks for ECG Biometric Recognition”, in *Pattern Recognition Letters*, vol. 126, pp. 78-85, September 2019. ISSN: 0167-8655. [DOI: 10.1016/j.patrec.2018.03.028].
- IJ-49 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, “3-D Granulometry using Image Processing”, in *IEEE Transactions on Industrial Informatics*, vol. 15, n. 3, pp. 1251-1264, March 2019. ISSN: 1551-3203. [DOI: 10.1109/TII.2018.2856466].
- IJ-50 Y. Zhai, Q. Ke, Y. Xu, W. Deng, J. Gan, J. Zeng, W. Zhou, F. Scotti, R. Donida Labati, V. Piuri, “Mobile Communication Base Station Antenna Measurement using Unmanned Aerial Vehicle”, in *IEEE Access*, vol. 7, pp. 119892-119903, August 2019. ISSN: 2169-3536. [DOI: 10.1109/ACCESS.2019.2935613].
- IJ-51 S. De Capitani di Vimercati, S. Foresti, G. Livraga, V. Piuri, P. Samarati, “Security-Aware Data Allocation in Multicloud Scenarios”, in *IEEE Transactions on Dependable and Secure Computing (TDSC)*, 2019. ISSN: 1941-0018. [DOI: 10.1109/JSYST.2019.2893212]
- IJ-52 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, “A Novel Pore Extraction Method for Heterogeneous Fingerprint Images using Convolutional Neural Networks”, in *Pattern Recognition Letters, Special Issue on Integrating Biometrics and Forensics*, vol. 113, pp. 58-66, October 2018. ISSN: 0167-8655. [DOI: 10.1016/j.patrec.2017.04.001].
- IJ-53 A. Rikalovic, I. Cosic, R. Donida Labati, V. Piuri, “Intelligent Decision Support System for Industrial Site Classification: A GIS-based Hierarchical Neuro-Fuzzy Approach”, in *IEEE Systems Journal*, vol. 12, n.3, pp. 2970-2981, September 2018. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2017.2697043].
- IJ-54 S. De Capitani di Vimercati, S. Foresti, G. Livraga, V. Piuri, P. Samarati, “Supporting User Requirements and Preferences in Cloud Plan Selection”, in *IEEE Transactions on Services Computing*, 2018. ISSN: 1939-1374. [DOI: 10.1109/TSC.2017.2777977]
- IJ-55 A. Rikalovic, I. Cosic, V. Piuri, R. Donida Labati, “A Comprehensive Method for Industrial Site Selection: The Macro Location Analysis”, in *IEEE Systems Journal*, vol. 11, no. 4, pp. 2971-2980, December 2017. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2015.2444471].
- IJ-56 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Computational Intelligence for Biometric Applications: A survey”, in *International Journal of Computing*, vol. 15, no. 1, pp. 40-49, 2016. ISSN: 2312-5381.
- IJ-57 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Biometric Recognition in Automated Border Control: A Survey”, in *ACM Computing Surveys*, vol. 49, no. 2, pp. 24:1-24:3, November 2016. ISSN: 0360-0300. [DOI: 10.1145/2933241].
- IJ-58 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “Toward Unconstrained Fingerprint Recognition: A Fully-Touchless 3-D System Based on two Views on the Move”, in *IEEE Transactions on Systems, Man and Cybernetics: Systems*, vol. 46, no. 2, pp. 202-219, February 2016. ISSN: 2168-2216. [DOI: 10.1109/TSMC.2015.2423252].
- IJ-59 S. Ferrari, M. Lazzaroni, V. Piuri, A. Salman, L. Cristaldi, M. Faifer, S. Toscani, “Solar Panel Modelling through Computational Intelligence Techniques”, in *Measurement*, pp. 572-580, 2016. ISSN: 0263-2241. [DOI: 10.1016/j.measurement.2016.07.032]
- IJ-60 M. Lazzaroni, S. Ferrari, V. Piuri, A. Salman, L. Cristaldi, M. Faifer, “Models for Solar Radiation Prediction based on Different Measurement Sites”, in *Measurement*, pp. 346-363, 2015. ISSN: 0263-2241. [DOI: http://dx.doi.org/10.1016/j.measurement.2014.11.037]
- IJ-61 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “Touchless Fingerprint Biometrics: a Survey on 2D and 3D Technologies”, in *Journal of Internet Technology*, 2014. ISSN: 1607-9264.
- IJ-62 C. A. Ardagna, R. Jhawar, V. Piuri, “Dependability Certification of Services: A Model-Based Approach”, in *Computing*, Springer, pp. 1-28, October, 2013. ISSN: 0010-485X. [DOI: 10.1007/s00607-013-0348-7]

- IJ-63 R. Jhawar, V. Piuri, M. D. Santambrogio, "Fault Tolerance Management in Cloud Computing: A System-Level Perspective", in *IEEE Systems Journal*, pp. 288-297, June, 2013. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2012.2221934]
- IJ-64 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Wildfire Smoke Detection using Computational Intelligence Techniques Enhanced with Synthetic Smoke Plume Generation", in *IEEE Transactions on Systems, Man and Cybernetics - Part A: Systems and Humans*, pp. 1003-1012, June, 2013. ISSN: 1083-4427. [DOI: 10.1109/TSMCA.2012.2224335]
- IJ-65 F. Bellocchio, S. Ferrari, V. Piuri, N.A. Borghese, "Hierarchical approach for multi-scale support vector regression", in *IEEE Transactions on Neural Networks and Learning Systems*, pp. 1448-1460, September, 2012. ISSN: 1045-9227. [DOI: 10.1109/TNNLS.2012.2205018]
- IJ-66 M. Calabrese, A. Amato, V. Di Lecce, V. Piuri, "Hierarchical-granularity holonic modelling", in *Journal of Ambient Intelligence and Humanized Computing*, Springer, pp. 199-209, September, 2010. ISSN: 1868-5137. [DOI: 10.1007/s12652-010-0013-3]
- IJ-67 F. Scotti, V. Piuri, "Adaptive Reflection Detection and Location in Iris Biometric Images by Using Computational Intelligence Techniques", in *IEEE Transactions on Instrumentation and Measurement*, pp. 1825-1833, July, 2010. ISSN: 0018-9456. [DOI: 10.1109/TIM.2009.2030866]
- IJ-68 V. Piuri, F. Scotti, "Design of an Automatic Wood Types Classification System by Using Fluorescence Spectra", in *IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews*, pp. 358-366, May, 2010. ISSN: 1094-6977. [DOI: 10.1109/TSMCC.2009.2039479]
- IJ-69 S. Ferrari, F. Bellocchio, V. Piuri, N.A. Borghese, "A Hierarchical RBF Online Learning Algorithm for Real-Time 3-D Scanner", in *IEEE Transactions on Neural Networks*, pp. 275-285, February, 2010. ISSN: 1045-9227. [DOI: 10.1109/TNN.2009.2036438]
- IJ-70 W. Pedrycz, A. Amato, V. Di Lecce, V. Piuri, "Fuzzy Clustering With Partial Supervision in Organization and Classification of Digital Images", in *IEEE Transactions on Fuzzy Systems*, pp. 1008-1026, August, 2008. ISSN: 1063-6706. [DOI: 10.1109/TFUZZ.2008.917287]
- IJ-71 S. Ferrari, G. Ferrigno, V. Piuri, N.A. Borghese, "Reducing and Filtering Point Clouds With Enhanced Vector Quantization", in *IEEE Transactions on Neural Networks*, pp. 161-177, January, 2007. ISSN: 1045-9227. [DOI: 10.1109/TNN.2006.886854]
- IJ-72 F. Amigoni, A. Brandolini, V. Caglioti, V. Di Lecce, A. Guerriero, M. Lazzaroni, F. Lombardi, R. Ottoboni, E. Pasero, V. Piuri, O. Scotti, D. Somenzi, "Agencies for perception in environmental monitoring", in *IEEE Transactions on Instrumentation and Measurement*, pp. 1038-1050, August, 2006. ISSN: 0018-9456. [DOI: 10.1109/TIM.2006.877747]
- IJ-73 M. Choi, N. Park, V. Piuri, F. Lombardi, "Reliability measurement of mass storage system for onboard instrumentation", in *IEEE Transactions on Instrumentation and Measurement*, pp. 2297-2304, December, 2005. ISSN: 0018-9456. [DOI: 10.1109/TIM.2005.858514]
- IJ-74 S. Ferrari, I. Frosio, V. Piuri, N.A. Borghese, "Automatic multiscale meshing through HRBF networks", in *IEEE Transactions on Instrumentation and Measurement*, pp. 1463-1470, August, 2005. ISSN: 0018-9456. [DOI: 10.1109/TIM.2005.851471]
- IJ-75 M. Gamassi, M. Lazzaroni, M. Misino, V. Piuri, D. Sana, F. Scotti, "Quality assessment of biometric systems: a comprehensive perspective based on accuracy and performance measurement", in *IEEE Transactions on Instrumentation and Measurement*, pp. 1489-1496, August, 2005. ISSN: 0018-9456. [DOI: 10.1109/TIM.2005.851087]
- IJ-76 M. Choi, N. Park, V. Piuri, F. Lombardi, "Evaluating the repair of system-on-chip (SoC) using connectivity", in *IEEE Transactions on Instrumentation and Measurement*, pp. 1464-1472, December, 2004. ISSN: 0018-9456. [DOI: 10.1109/TIM.2004.834603]
- IJ-77 D. Ardagna, C. Francalanci, V. Piuri, "Designing and rightsizing the information system architecture", in *Information Systems Frontiers*, Springer, pp. 229-245, September, 2004. ISSN: 1387-3326. [DOI: 10.1023/B:ISFI.0000037878.11967.50]

- IJ-78 M. Choi, N. Park, V. Piuri, Y.-B. Kim, F. Lombardi, "Balanced dual-stage repair for dependable embedded memory cores", in *Journal of Systems Architecture*, pp. 281-285, April, 2004. ISSN: 1383-7621. [DOI: 10.1016/j.sysarc.2003.08.004]
- IJ-79 W.P.M. Allen, D.G. Bailey, S.N. Demidenko, V. Piuri, "Analysis and application of digital spectral warping in analog and mixed-signal testing", in *IEEE Transactions on Reliability*, pp. 444-457, December, 2003. ISSN: 0018-9529. [DOI: 10.1109/TR.2003.821933]
- IJ-80 C. Alippi, C. de Russis, V. Piuri, "A neural-network based control solution to air-fuel ratio control for automotive fuel-injection systems", in *IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews*, pp. 259-268, May, 2003. ISSN: 1094-6977. [DOI: 10.1109/TSMCC.2003.814035]
- IJ-81 G. Bertoni, L. Breveglieri, I. Koren, P. Maistri, V. Piuri, "Error analysis and detection procedures for a hardware implementation of the advanced encryption standard", in *IEEE Transactions on Computers*, pp. 492-505, April, 2003. ISSN: 0018-9340. [DOI: 10.1109/TC.2003.1190590 ]
- IJ-82 S. Demidenko, V. Piuri, "Concurrent diagnosis in digital implementations of neural networks", in *Neurocomputing*, Elsevier, pp. 879-903, October, 2002. ISSN: 0925-2312. [DOI: 10.1016/S0925-2312(01)00678-6]
- IJ-83 M. Choi, N. Park, F. Lombardi, V. Piuri, "Quality enhancement of reconfigurable multichip module systems by redundancy utilization", in *IEEE Transactions on Instrumentation and Measurement*, pp. 740-749, August, 2002. ISSN: 0018-9456. [DOI: 10.1109/TIM.2002.803305]
- IJ-84 L. Breveglieri, V. Piuri, "Digital Median Filters", in *The Journal of VLSI Signal Processing*, Springer, pp. 191-206, July, 2002. ISSN: 1939-8018. [DOI: 10.1023/A:1015487418553]
- IJ-85 N. Park, F. Lombardi, V. Piuri, "Testing and evaluating the quality-level of stratified multichip module instrumentation", in *IEEE Transactions on Instrumentation and Measurement*, pp. 1615-1624, December, 2001. ISSN: 0018-9456. [DOI: 10.1109/19.982955 ]
- IJ-86 S. Ferrari, A. Borghese, V. Piuri, "Multiscale models for data processing: an experimental sensitivity analysis", in *IEEE Transactions on Instrumentation and Measurement*, pp. 995-1002, August, 2001. ISSN: 0018-9456. [DOI: 10.1109/19.948314]
- IJ-87 A. Antola, F. Ferrandi, V. Piuri, M. Sami, "Semiconcurrent error detection in data paths", in *IEEE Transactions on Computers*, pp. 449-465, May, 2001. ISSN: 0018-9340. [DOI: 10.1109/12.926159 ]
- IJ-88 C. Alippi, V. Piuri, F. Scotti, "Accuracy versus Complexity in RBF Neural Networks: A System Level Design Approach", in *IEEE Instrumentation and Measurement Magazine*, pp. 32-36, March, 2001. ISSN: 1094-6969. [DOI: 10.1109/5289.911171 ]
- IJ-89 V. Piuri, "Analysis of fault tolerance in artificial neural networks", in *Journal of Parallel and Distributed Computing*, Academic Press, pp. 18-48, January, 2001. ISSN: 0743-7315. [DOI: 10.1006/jpdc.2000.1663]
- IJ-90 H. Lim, V. Piuri, E.E., Jr. Swartzlander, "A serial-parallel architecture for two-dimensional discrete cosine and inverse discrete cosine transforms", in *IEEE Transactions on Computers*, pp. 1297-1309, December, 2000. ISSN: 0018-9340. [DOI: 10.1109/12.895848 ]
- IJ-91 C. Alippi, E. Casagrande, F. Scotti, V. Piuri, "Composite real-time image processing for railways track profile measurement", in *IEEE Transactions on Instrumentation and Measurement*, pp. 559-564, June, 2000. ISSN: 0018-9456. [DOI: 10.1109/19.850395]
- IJ-92 L. Benetazzo, M. Bertocco, F. Ferraris, A. Ferrero, C. Offelli, M. Parvis, V. Piuri, "A Web-based distributed virtual educational laboratory", in *IEEE Transactions on Instrumentation and Measurement*, pp. 349-356, April, 2000. ISSN: 0018-9456. [DOI: 10.1109/19.843077]
- IJ-93 C. Alippi, V. Piuri, "Neural modeling of dynamic systems with nonmeasurable state variables", in *IEEE Transactions on Instrumentation and Measurement*, IEEE, pp. 1073-1080, December, 1999. ISSN: 0018-9456. [DOI: 10.1109/19.816116 ]
- IJ-94 F. Marino, V. Piuri, E.E., Jr. Swartzlander, "A parallel implementation of the 2-D discrete wavelet transform without interprocessor communications", in *IEEE Transactions on Signal Processing*, pp. 3179-3184, November, 1999. ISSN: 1053-587X. [DOI: 10.1109/78.796458]

- IJ-95 C. Alippi, F. Casamatta, L. Furlan, A. Pelagotti, V. Piuri, "NeSS: a Simulation Environment for Behavioral Design of Neural Networks for Prediction and Control", in *Integrated Computer-Aided Engineering*, IOS Press, pp. 223-232, August, 1999. ISSN: 1069-2509.
- IJ-96 C. Citterio, A. Pelagotti, V. Piuri, L. Rocca, "Function approximation-fast-convergence neural approach based on spectral analysis", in *IEEE Transactions on Neural Networks*, pp. 725-740, July, 1999. ISSN: 1045-9227. [DOI: 10.1109/72.774207]
- IJ-97 A. Ferrero, V. Piuri, "A simulation tool for virtual laboratory experiments in a WWW environment", in *IEEE Transactions on Instrumentation and Measurement*, pp. 741-746, June, 1999. ISSN: 0018-9456. [DOI: 10.1109/19.772214]
- IJ-98 C. Francalanci, V. Piuri, "Designing Information Technology Architectures: a Cost-Oriented Methodology", in *Journal of Information Technology*, Palgrave Macmillan (invited paper), pp. 181-192, June, 1999. ISSN: 0268-3962. [DOI: 10.1080/026839699344674]
- IJ-99 C. Alippi, F. Fummi, V. Piuri, M. Sami, D. Sciuto, "Testability analysis and behavioral testing of the Hopfield neural paradigm", in *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, pp. 507-511, September, 1998. ISSN: 1063-8210. [DOI: 10.1109/92.711323]
- IJ-100S. Bettola, V. Piuri, "High performance fault-tolerant digital neural networks", in *IEEE Transactions on Computers*, pp. 357-363, March, 1998. ISSN: 0018-9340. [DOI: 10.1109/12.660173]
- IJ-101S. Wang, V. Piuri, E.E. Swartzlander, Jr., "Hybrid CORDIC algorithms", in *IEEE Transactions on Computers*, pp. 1202-1207, November, 1997. ISSN: 0018-9340. [DOI: 10.1109/12.644295]
- IJ-102A. Pelagotti, V. Piuri, "Entropic analysis and incremental synthesis of multilayered feedforward neural networks", in *International Journal of Neural Systems*, World Scientific, pp. 647-659, October, 1997. ISSN: 0129-0657. [DOI: 10.1142/S0129065797000574]
- IJ-103C. Alippi, V. Piuri, "Experimental neural networks for prediction and identification", in *IEEE Transactions on Instrumentation and Measurement*, pp. 670-676, April, 1996. ISSN: 0018-9456. [DOI: 10.1109/19.492807]
- IJ-104L. Dadda, V. Piuri, "Pipelined adders", in *IEEE Transactions on Computers*, pp. 348-356, March, 1996. ISSN: 0018-9340. [DOI: 10.1109/12.485573]
- IJ-105A. Gandelli, V. Piuri, "Design and implementation of a massively parallel architecture for high-level electronic measurements", in *Microprocessors and Microsystems*, pp. 361-373, August, 1995. ISSN: 0141-9331. [DOI: 10.1016/0141-9331(95)91158-Z]
- IJ-106C. Alippi, V. Piuri, M. Sami, "Sensitivity to errors in artificial neural networks: a behavioral approach", in *IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications*, pp. 358-361, June, 1995. ISSN: 1057-7122. [DOI: 10.1109/81.390269]
- IJ-107V. Piuri, M. Sami, D. Sciuto, "Testability of artificial neural networks: a behavioral approach", in *Journal of Electronic Testing*, Academic Kluwer Publishing Co., pp. 179-190, April, 1995. ISSN: 0923-8174. [DOI: 10.1007/BF00993085]
- IJ-108S. Demidenko, V. Piuri, "Signature compression: a generalised description and its applications", in *Journal of Microelectronics Systems Integration*, Plenum Press, pp. 19-34, March, 1995. ISSN: 1070-0056.
- IJ-109L. Dadda, V. Piuri, "High-throughput modular convolvers with flexible defect/fault tolerance features", in *Journal of Microelectronics Systems Integration*, Plenum Press, pp. 65-80, March, 1995. ISSN: 1070-0056.
- IJ-110S. Demidenko, A. Ivanyukovich, L. Makhinst, V. Piuri, "On the binary sequences with indistinguishable signature for a given error multiplicity in electronic testing", in *IES Journal on Electronics and Computer Engineering*, The Institution of Engineers, pp. 63-66, February, 1995
- IJ-111A. Dell'Acqua, H. Alexanian, C. Alippi, G. Appelquist, P. Bailly, R. Benetta, S. Berglund, J. Bezamat, F. Blouzon, C. Bohm, L. Breveglieri, S. Brigati, P. Carlson, P. Cattaneo, L. Dadda, J. David, M. Engstrom, G. Fumagalli, U. Gatti, J.F. Genat, V.G. Goggi, S.F. Gong, M. Hansen, H. Hentzell, I. Hoglund, S. Inkinen, A. Kerek, O. LeDortz, B. Lofstedt, F. Maloberti, P. Nayman, A. Odmark, V. Piuri, G. Polesello, F. Salice, N. Sami, A. Savoy-Navarro, R. Stefanelli, R. Sundblad, C. Svensson, G. Torelli, J.P. Vanuxem, N. Yamdagni,

- J. Yuan, "FERMI-a new generation of electronic modules for large data acquisition arrays required by high energy physics", in *IEEE Transactions on Components, Packaging, and Manufacturing Technology, Part B: Advanced Packaging*, pp. 302-309, August, 1994. ISSN: 1070-9894. [DOI: 10.1109/96.311778]
- V. Piuri, "Design of fault-tolerant distributed control systems", in *IEEE Transactions on Instrumentation and Measurement*, pp. 257-264, April, 1994. ISSN: 0018-9456. [DOI: 10.1109/96.311778]
- IJ-112V. Piuri, "Design of fault-tolerant distributed control systems", in *IEEE Transactions on Instrumentation and Measurement*, pp. 257-264, April, 1994. [DOI: 10.1109/19.293430]
- IJ-113C. Alippi, G. Appelquist, S. Berglund, C. Bohm, L. Breveglieri, S. Brigati, P. Carlson, P. Cattaneo, L. Dadda, J. David, L. Del Buono, A. Dell'Acqua, M. Engstrom, G. Fumagalli, U. Gatti, J.F. Genat, G. Goggi, M. Hansen, H. Hentzell, I. Høglund, S. Inkinen, A. Kerek, H. Lebbolo, O. LeDortz, B. Lofstedt, F. Maloberti, P. Nayman, S.-T. Persson, V. Piuri, F. Salice, M. Sami, A. Savoy-Navarro, R. Stefanelli, R. Sundblad, C. Svensson, G. Torelli, J.P. Vanuxem, N. Yamdagni, J. Yuan, R. Zitoun, "A digital front-end and readout microsystem for calorimetry at LHC", in *Nuclear Instruments and Methods in Physics Research. Section A*, Elsevier, pp. 180-184, April, 1994. ISSN: 0168-9002. [DOI: 10.1016/0168-9002(94)90668-8]
- IJ-114A. Dell'Acqua, M. Hansen, B. Lofstedt, J.P. Vanuxem, C. Svensson, J. Yuan, H. Hentzell, C. Alippi, L. Breveglieri, L. Dadda, V. Piuri, F. Salice, M. Sami, R. Stefanelli, P. Cattaneo, G. Fumagalli, V.G. Goggi, S. Brigati, U. Gatti, F. Maloberti, G. Torelli, P. Carlson, C. Fuglesang, A. Kerek, G. Appelquist, S. Berglund, C. Bohm, N. Yamdagni, R. Sundblad, "A digital front-end readout microsystem for calorimetry at LHC-The FERMI project", in *IEEE Transactions on Nuclear Science*, pp. 516-531, August, 1993. ISSN: 0018-9499. [DOI: 10.1109/23.256611]
- IJ-115L. Breveglieri, V. Piuri, "Fast pipelined complex convolver", in *Electronics Letters*, pp. 2252-2254, November, 1992. ISSN: 0013-5194. [DOI: 10.1049/el:19921448]
- IJ-116F. Distanto, V. Piuri, "Behavioral simulation of array processors in the APES environment", in *Simulation, Society for Computer Simulation*, pp. 264-269, October, 1992. ISSN: 0037-5497. [DOI: 10.1177/003754979205900407]
- IJ-117F. Distanto, V. Piuri, "Behavioral Design, Simulation, and Evaluation of Array Processors: APES Environment", in *International Journal in Computer Simulation*, pp. 321-334, 1991. ISSN: 1055-8470.
- IJ-118F. Distanto, V. Piuri, "Hill-climbing heuristics for optimal hardware dimensioning and software allocation in fault-tolerant distributed systems", in *IEEE Transactions on Reliability*, pp. 28-39, April, 1989. ISSN: 0018-9529. [DOI: 10.1109/24.24571]
- IJ-119D. Caviglia, V. Piuri, M. Santomauro, "About folded-PLA area and folding evaluation", in *Integration - the VLSI Journal*, pp. 193-215, December, 1987. ISSN: 0167-9260. [DOI: 10.1016/0167-9260(87)90015-0]
- IJ-120V. Piuri, E. Tourouta, "About fault-tolerant allocation of tasks in multiprocessor architectures and system dimensioning", in *Microprocessing and Microprogramming*, pp. 335-349, October, 1987. ISSN: 1383-7621. [DOI: 10.1016/0165-6074(87)90152-9]
- IJ-121V. Piuri, E. Tourouta, "Fault-tolerant allocation of the computation in multi-processor systems and their dimensioning", in *Raspredeleennye Upravljajuscie I Vycislitel'nye Systemy - Nauka* (Distributed Management and Information Systems - Science), in Russian, Academy of Sciences of the USSR, pp. 109-126, 1987
- IJ-122G. Cattaneo, V. Piuri, N. Scarabottolo, F. Urero, "CHILL concurrency on Intel iAPX 432 architecture", in *Microprocessing and Microprogramming*, pp. 233-251, May, 1985. ISSN: 1383-7621. [DOI: 10.1016/0165-6074(85)90031-6]

### 9.3 Refereed papers in proceedings of international conferences and workshops

- IC-1 P. Coscia, A. Genovese, F. Scotti and V. Piuri, "Features Disentanglement for explainable Eonvolutional Neural Networks", in *Proc. of the 2024 IEEE Int. Conf. on Image Processing (ICIP 2024)*, Abu Dhabi, UAE, pp. 514-520, October 27-30, 2024. ISBN: 979-8-3503-4939-9. [DOI: 10.1109/ICIP51287.2024.10647568]

- IC-2 Z. Mizgalewicz, C. R. Cuenca, M. R. Rivolta, R. Donida Labati, F. Scotti and V. Piuri, R. Sassi, “Minimal Preprocessing of ECG Signals for Deep Learning-Based Biometric Systems”, in *Proc. of the IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2024)*, pp. 1-5, 'an, China, June 14-16, 2024. ISBN: 979-8-3503-2299-6. [DOI: 10.1109/CIVEMSA58715.2024.10586617]
- IC-3 A. J. Aragon Molina, D. De Angelis, R. Donida Labati, F. Scotti, V. Piuri , “Deep Neural Networks for Assessing the Legal Age from Panoramic Dental X-ray Images”, in *Proc. of the IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2024)*, pp. 1-6, 'an, China, June 14-16, 2024. ISBN: 979-8-3503-2299-6. [DOI: 10.1109/CIVEMSA58715.2024.10586604]
- IC-4 P. Coscia, A. Genovese, F. Scotti, V. Piuri, “Adversarial Defect Synthesis for Industrial Products in Low Data Regime”, in *Proc. of the 2023 IEEE Int. Conf. on Image Processing (ICIP 2023)*, Kuala Lumpur, Malaysia, pp. 1360-1364, October 8-11, 2023. ISBN: 978-1-7281-9835-4. [DOI: 10.1109/ICIP49359.2023.10222874]
- IC-5 D. Agostinello, A. Genovese, V. Piuri, “Anomaly-based Intrusion Detection System for DDoS Attack with Deep Learning Techniques”, in *Proc. of the 20th Int. Conf. on Security and Cryptography (SECRYPT 2023)*, Rome, Italy, pp. 267-275, July 10-12, 2023. i ISBN: 978-989-758-666-8. [DOI: 10.5220/0012146100003555]
- IC-6 P. Coscia, A. Genovese, V. Piuri, F. Rundo, F. Scotti, “Tree-based Optimization for Image-to-Image Translation with Imbalanced Datasets on the Edge”, in *Proc. of the 2023 IEEE Int. Conf. on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2023)*, pp. 1-6, June 12-14, 2023. ISBN: 979-8-3503-3636-8. [DOI: 10.1109/CIVEMSA57781.2023.10230904]
- IC-7 R. Donida Labati, V. Piuri, F. Rundo, F. Scotti, “Iris Reflection Segmentation from Ocular Images Acquired in Uncontrolled and Uncooperative Conditions”, in *2023 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA)*, pp. 1-6, June 12-14, 2023 [DOI: 10.1109/CIVEMSA57781.2023.1023]
- IC-8 P. Coscia, A. Genovese, F. Scotti, V. Piuri, “Applications and Limits of Image-to-Image Translation Models”, in *Proc. of the 24th Int. Conf. on Digital Signal Processing (DSP 2023)*, Rhodes Island, Greece, pp. 1-5, June 11-13, 2023. ISBN: 979-8-3503-3959-8. [DOI: 10.1109/DSP58604.2023.10167879]
- IC-9 A. Genovese, V. Piuri, F. Scotti, “ALL-IDB Patches: Whole Slide Imaging for Acute Lymphoblastic Leukemia Detection using Deep Learning”, in *Proc. of the IEEE Int. Conf. on Acoustics Speech and Signal Processing Workshops (ICASSPW 2023)*, Rhodes Island, Greece, pp. 1-5, June 4-10, 2023. ISBN: 979-8-3503-0261-5. [DOI: 10.1109/ICASSPW59220.2023.10193429]
- IC-10 B. Moriarty, C-F Chen, S. Hu, S. Moran, M. Pistoia, V. Piuri, P. Samarati, “Utility-Preserving Biometric Information Anonymization”, in *Proc. of the 27th European Symposium on Research in Computer Security (ESORICS 2022)*, Copenhagen, Denmark, September 26-30, 2022. ISBN: 978-3-031-17145-1. [DOI: [https://doi.org/10.1007/978-3-031-17146-8\\_2](https://doi.org/10.1007/978-3-031-17146-8_2)]
- IC-11 A. Genovese, X. Bushi, L. D'Antiga, M. Lazzaroni, G. Mawi, E. Nicastro, V. Piuri, A. Scocciolini, F. Scotti, A. Tomarelli, and T. Vicarelli, “Biliary Atresia Detection using Color Clustering and Nearest Neighbor Classification: A User Interactive Approach”, in *Proc. of the 2022 IEEE Int. Conf. on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2022)*, Chemnitz, Germany, pp. 1-4, June 15-17, 2022. ISBN: 978-1-6654-3445-4. [DOI: 10.1109/CIVEMSA53371.2022.9853677].
- IC-12 M. Abukmeil, S. Ferrari, A. Genovese, V. Piuri, F. Scotti, “Grad2VAE: An Explainable Variational Autoencoder Model based on Online Attentions Preserving Curvatures of Representations”, *Proc. of the 21<sup>st</sup> Int. Conf. on Image Analysis and Processing (ICIAP)*, Lecce, Italy, pp. 670-681, May 23-27, 2022. ISBN: 978-3-031-06427-2. [DOI: 10.1007/978-3-031-06427-2.56].
- IC-13 A. Genovese, V. Bernardoni, V. Piuri, F. Scotti, F. Tessore, “Photovoltaic Energy Prediction for New-Generation Cells with Limited Data: A Transfer Learning Approach”, in *Proc. of the 2022 IEEE Int. Instrumentation and Measurement Technology Conf. (I2MTC 2022)*, Ottawa, ON, Canada, pp. 1-6, May 16-19, 2022. ISBN: 978-1-6654-8360-5. [DOI: 10.1109/I2MTC48687.2022.9806492].

- IC-14 D.F. Hsu, M. Shehata, S.-M. Hung, S. Shimojo, R. Kanai, C. Schweikert, M.W. David, V. Piuri, J. Ma, "Human Cognition and Hyper Intelligence", in *Proc. of the 2021 IEEE Int. Conf. on Dependable, Autonomic and Secure Computing, Int. Conf. on Pervasive Intelligence and Computing, Int. Conf. on Cloud and Big Data Computing, Int. Conf. on Cyber Science and Technology Congress (DASC/PiCom/CBDCCom/CyberSciTech)*, AB, Canada, pp. 775-781, October 25-28, 2021. ISBN: 978-1-6654-2174-4. [DOI: 10.1109/DASC-PiCom-CBDCCom-CyberSciTech52372.2021.00127]
- IC-15 F. Rundo, A. Genovese, R. Leotta, F. Scotti, V. Piuri, and S. Battiato, "Advanced 3D Deep Non-Local Embedded System for Self-Augmented X-ray-based COVID-19 Assessment", *Proc. of the 2021 IEEE/CVF Int. Conf. on Computer Vision Workshops (ICCVW 2021)*, Montreal, QC, Canada, pp. 423-432, October 11-17, 2021. ISBN: 978-1-6654-0191-3. [DOI: 10.1109/ICCVW54120.2021.00051].
- IC-16 F. Rundo, R. Leotta, V. Piuri, A. Genovese, F. Scotti, and S. Battiato, "Intelligent Road Surface Deep Embedded Classifier for an Efficient Physio-based Car Driver Assistance", *Proc. of the 1<sup>st</sup> IEEE Int. Conf. on Autonomous Systems (ICAS 2021)*, Montreal, QC, Canada, pp. 1-5, August 11-13, 2021. ISBN: 978-1-7281-7289-7. [DOI: 10.1109/ICAS49788.2021.9551124].
- IC-17 M. Abukmeil, A. Genovese, V. Piuri, F. Rundo, F. Scotti, "Towards Explainable Semantic Segmentation for Autonomous Driving Systems by Multi-Scale Variational Attention", *Proc. of the 1<sup>st</sup> IEEE Int. Conf. on Autonomous Systems (ICAS 2021)*, Montreal, QC, Canada, pp. 1-5, August 11-13, 2021. ISBN: 978-1-7281-7289-7. [DOI: 10.1109/ICAS49788.2021.9551172].
- IC-18 R. Donida Labati, D. De Angelis, B. Bertoglio, C. Cattaneo, F. Scotti, V. Piuri, "Automatic Face Recognition for Forensic Identification of Persons Deceased in Humanitarian Emergencies", in *Proceedings of the IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2021)*, Hong Kong, China, pp. 1-6, June 18-20, 2021. ISBN: 9781665412490. [DOI: 10.1109/CIVEMSA52099.2021.9493678].
- IC-19 A. Genovese, M. S. Hosseini, V. Piuri, K. N. Plataniotis, and F. Scotti, "Histopathological Transfer Learning for Acute Lymphoblastic Leukemia Detection", *Proc. of the 2021 IEEE Int. Conf. on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2021)*, Hong Kong, China, pp. 1-6, June 18-20, 2021. ISBN: 978-1-6654-1249-0. [DOI: 10.1109/CIVEMSA52099.2021.9493677].
- IC-20 A. Genovese, M. S. Hosseini, V. Piuri, K. N. Plataniotis, and F. Scotti, "Acute Lymphoblastic Leukemia Detection based on Adaptive Unsharpening and Deep Learning", *Proc. of the 2021 IEEE Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP 2021)*, Toronto, ON, Canada, pp. 1205-1209, June 6-11, 2021. ISBN: 978-1-7281-7605-5. [DOI: 10.1109/ICASSP39728.2021.9414362].
- IC-21 F. Rundo, R. Leotta, F. Trenta, G. Bellitto, F. Proietto Salanitri, V. Piuri, A. Genovese, R. Donida Labati, F. Scotti, C. Spampinato, S. Battiato, "Advanced Car Driving Assistant System: A Deep Non-Local Pipeline Combined with 1D Dilated CNN for Safety Driving", in *Proceedings of the 1st International Conference on Image Processing and Vision Engineering (IMPROVE 2021)*, pp. 81-90, April 28-30, 2021. ISBN: 9789897585111. [DOI: 10.5220/0010381000810090].
- IC-22 A. Genovese, V. Piuri, F. Rundo, F. Scotti, C. Spampinato, "Driver Attention Assistance by Pedestrian/Cyclist Distance Estimation From a Single RGB Image: A CNN-based Semantic Segmentation Approach", *Proc. of the 22<sup>nd</sup> IEEE Int. Conf. on Industrial Technology (ICIT 2021)*, Valencia, Spain, pp. 875-880, March 10-12, 2021. ISBN: 978-1-7281-5730-6. [DOI: 10.1109/ICIT46573.2021.9453567].
- IC-23 F. Rundo, F. Trenta, R. Leotta, C. Spampinato, V. Piuri, S. Conoci, R. Donida Labati, F. Scotti, S. Battiato, "Advanced Temporal Dilated Convolutional Neural Network for a Robust Car Driver Identification", in *Pattern Recognition. ICPR International Workshops and Challenges*, China, pp. 184-199, February 21, 2021. ISBN: 9783030687922. [DOI: 10.1007/978-3-030-68793-9\_13].
- IC-24 R. Donida Labati, V. Piuri, F. Rundo, F. Scotti, C. Spampinato, "Biometric Recognition of PPG Cardiac Signals using Transformed Spectrogram Images", in *Pattern Recognition. ICPR International Workshops and Challenges*, China, pp. 244-257, February 21, 2021. ISBN: 9783030687922. [DOI: 10.1007/978-3-030-68793-91\_17].



- IC-25 M. Abukmeil, S. Ferrari, A. Genovese, V. Piuri, F. Scotti, "Unsupervised Learning From Limited Available Data by  $\beta$ -NMF and Dual Autoencoder", *Proc. of the 27<sup>th</sup> IEEE Int. Conf. on Image Processing (ICIP 2020)*, Abu Dhabi, UAE, pp. 81-85, October 25-28, 2020. ISBN: 978-1-7281-6395-6. [DOI: 10.1109/ICIP40778.2020.9191252].
- IC-26 M. Abukmeil, S. Ferrari, A. Genovese, V. Piuri, F. Scotti, "On Approximating the Non-Negative Rank: Applications to Unsupervised Image Reduction", *Proc. of the 2020 IEEE Int. Conf. on Computational Intelligence & Virtual Environments for Measurement Systems and Applications (CIVEMSA 2020)*, Tunisi, Tunisia, pp. 1-6, June 22-24, 2020. ISBN: 978-1-7281-4433-7. [DOI: 10.1109/CIVEMSA48639.2020.9132972].
- IC-27 A. Genovese, V. Piuri, F. Scotti, "Towards Explainable Face Aging with Generative Adversarial Networks", *Proc. of the 26<sup>th</sup> IEEE Int. Conf. on Image Processing (ICIP 2019)*, Taipei, Taiwan, pp. 3806-3810, September 22-25, 2019. ISBN: 978-1-5386-6249-6. [DOI: 10.1109/ICIP.2019.8803616].
- IC-28 A. Genovese, V. Piuri, F. Scotti, S. Vishwakarma, "Touchless Palmprint and Finger Texture Recognition: A Deep Learning Fusion Approach", *Proc. of the 2019 IEEE Int. Conf. on Computational Intelligence & Virtual Environments for Measurement Systems and Applications (CIVEMSA 2019)*, Tianjin, China, pp. 1-6, June 14-16, 2019. ISBN: 978-1-5386-8344-6. [DOI: 10.1109/CIVEMSA45640.2019.9071620].
- IC-29 Y. Cai, A. Genovese, V. Piuri, F. Scotti, M. Siegel, "IoT-based Architectures for Sensing and Local Data Processing in Ambient Intelligence: Research and Industrial Trends", in *Proc. of the 2019 IEEE Int. Instrumentation and Measurement Technology Conf. (I2MTC 2019)*, Auckland, New Zealand, pp. 1-6, May 20-23, 2019. ISBN: 978-1-5386-3460-8. [DOI: 10.1109/I2MTC.2019.8827110].
- IC-30 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Towards the Prediction of Renewable Energy Unbalance in Smart Grids", in *Proceedings of the 4<sup>th</sup> IEEE International Forum on Research and Technology for Society and Industry (RTSI 2018)*, Palermo, Italy, 10-13 September, 2018. ISBN: 978-1-5386-6282-3. [DOI: 10.1109/RTSI.2018.85484321].
- IC-31 Y. Zhai, L. Chen, L. Cao, W. Deng, Y. Zhi, J. Gan, J. Xu, J. Zeng, V. Piuri, F. Scotti, "A Novel Multi-Color Feature Selection Method for Person Re-identification," in *Proc. of the 2018 14th IEEE International Conference on Signal Processing (ICSP 2018)*, Beijing, China, pp. 1087-1092, August 12-16, 2018.
- IC-32 Y. Zhai, H. Cao, L. Cao, H. Ma, J. Gan, J. Zeng, V. Piuri, F. Scotti, W. Deng, Y. Zhi, J. Wang, "A Novel Finger-Knuckle-Print Recognition Based on Batch-normalized CNN," in *Proc. of the 2018 Chinese Conference on Biometric Recognition (CCBR 2018)*, Urumqi, China, pp. 11-21, August 11-12, 2018.
- IC-33 Y. Xu, H. Ma, L. Cao, H. Cao, Y. Zhai, V. Piuri, F. Scotti, "Robust Face Recognition Based on Convolutional Neural Network," in *Proc. of the 2017 International Conference on Manufacturing Science and Information Engineering (ICMSIE 2017)*, Guangzhou, Cina, pp. 39-44, December 2-3, 2017.
- IC-34 A. Anand, R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, "Age Estimation based on Face Images and Pre-Trained Convolutional Neural Networks", in *Proceedings of the IEEE Symposium on Computational Intelligence for Security and Defense Applications (CISDA 2017)*, Honolulu, HI, USA, pp. 1-7, November 27 - December 1, 2017. ISBN: 978-1-5386-2726-6. [DOI: 10.1109/SSCI.2017.8285381].
- IC-35 A. Anand, R. Donida Labati, M. Hanmandlu, V. Piuri, F. Scotti, "Text-Independent Speaker Recognition for Ambient Intelligence Applications by using Information Set Features", in *Proceedings of the IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2017)*, Annecy, France, pp. 30-35, July 26-28, 2017. ISBN: 978-1-5090-4253-1. [DOI: 10.1109/CIVEMSA.2017.7995297].
- IC-36 Y. Zhai, J. Liu, J. Zeng, V. Piuri, F. Scotti, Z. Ying, Y. Xu, J. Gan, "Deep Convolutional Neural Network for Facial Expression Recognition," in *Proc. of the International Conference on Image and Graphics (ICIG 2017)*, Shanghai, China, pp. 211-223, September 13-15, 2017.
- IC-37 Y. Xu, J. Liu, Z. Ying, L. Shang, J. liu, Y. Zhai, V. Piuri, F. Scotti, "SAR Automatic Target Recognition Based on Deep Convolutional Neural Network," in *Proc. of the International Conference on Image and Graphics (ICIG 2017)*, Shanghai, China, pp. 656-667, September 13-15, 2017.

- IC-38 A. Dineva, J.K. Tar, A. Várkonyi-Kóczy, V. Piuri, “Application of Fixed Point Transformation to Classical Model Identification using New Tuning Rule”, in *Proc. of the 2017 IEEE 15th Int. Symp. on Applied Machine Intelligence and Informatics (SAMI 2017)*—/, pp. 265-270, 2017. ISBN: 978-1-5090-5655-2. [DOI: 10.1109/SAMI.2017.7880315].
- IC-39 Y. Zhai, K. Liu, V. Piuri, Z. Ying, Y. Xu, “SAR Automatic Target Recognition based on K-means and Data Augmentation”, in *Proc. of the 2016 Int. Conf. on Intelligent Information Processing (ICIIP 2016)*, Wuhan, China, December 23-25, 2016. ISBN: 978-1-4503-4799-0. [DOI: 10.1145/3028842.3028894].
- IC-40 A. Anand, R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Enhancing fingerprint biometrics in Automated Border Control with adaptive cohorts”, in *Proceedings of the IEEE Symposium Series on Computational Intelligence (SSCI)*, Athens, Greece, pp. 1-8, December 6-9, 2016. ISBN: 978-1-5090-4240-1. [DOI: 10.1109/SSCI.2016.7850073].
- IC-41 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Emerging Biometric Technologies for Automated Border Control Gates”, in *Proceedings of the 13<sup>th</sup> International Conference on Pattern Recognition and Information Processing (PRIP 2016)*, Minsk, Bielorrussia, October 3-5, 2016.
- IC-42 A. Anand, R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Enhancing the Performance of Multimodal Automated Border Control Systems”, in *Proceedings of the 15<sup>th</sup> International Conference of the Biometrics Special Interest Group (BIOSIG 2016)*, Darmstadt, Germania, pp. 1-5, September 21-23, 2016. ISBN: 978-3-8857-9654-1. [DOI: 10.1109/BIOSIG.2016.7736922].
- IC-43 S. De Capitani di Vimercati, G. Livraga, V. Piuri, “Application Requirements with Preferences in Cloud-based Information Processing”, in *Proc. of the 2016 IEEE 2nd Int. Forum on Research and Technologies for Society and Industry - Leveraging a better tomorrow*, Bologna, Italy, pp. 1-4, September 7-9, 2016. ISBN: 978-1-5090-1131-5. [DOI: 10.1109/RTSI.2016.7740622].
- IC-44 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Computational Intelligence for Industrial and Environmental Applications”, in *Proceedings of the 8<sup>th</sup> IEEE International Conference on Intelligent Systems (IS 2016)*, Sofia, Bulgaria, pp. 8-14, September 4-6, 2016. ISBN: 978-1-5090-1354-8. [DOI: 10.1109/IS.2016.7737423].
- IC-45 A. Dineva, J.K. Tar, A. Varkonyi-Koczy, V. Piuri, “Adaptive Controller using Fuzzy Modeling and Sigmoid Generated Fixed Point Transformation”, in *Proc. of the 2016 IEEE 8th Int. Conf. on Intelligent Systems*, Sofia, Bulgaria, pp. 522-527, September 4-6, 2016. ISBN: 978-1-5090-1354-8. [DOI: 10.1109/IS.2016.7737472].
- IC-46 A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Towards Touchless Pore Fingerprint Biometrics: A Neural Approach”, in *Proc. of the 2016 IEEE Congress on Evolutionary Computation (CEC 2016)*, Vancouver, BC, Canada, July 24-29, 2016, pp. 4265-4272. ISBN: 978-1-5090-0623-6. [DOI: 10.1109/CEC.2016.7744332].
- IC-47 A. Dineva, J.K. Tar, A. Varkonyi-Koczy, V. Piuri, “Sigmoid Generated Fixed Point Transformation Control Scheme for Stabilization of Kapitza’s Pendulum System”, in *Proc. of the 2016 IEEE 20th Jubilee Int. Conf. on Intelligent Engineering Systems*, Budapest, Hungary, pp. 213-217, June 30, 2016. ISBN: 978-1-5090-1216-9. [DOI: 10.1109/INES.2016.7555122]
- IC-48 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Analyzing Images in Frequency Domain to Estimate the Quality of Wood Particles in OSB Production”, in *Proceedings of the IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2016)*, Budapest, Hungary, pp. 1-6, June 27-29, 2016. ISBN: 978-1-4673-9759-9. [DOI: 10.1109/CIVEMSA.2016.7524251].
- IC-49 A. Dineva, J.K. Tar, A. Varkonyi-Koczy, V. Piuri, “Adaptive Controller using Fixed Point Transformation for Regulating Propofol Administration through Wavelet-based Anesthetic Value”, in *Proc. of the 2016 IEEE Int. Symp. on Medical Measurements and Applications*, Benevento, Italy, pp. 1-6, May 15-18, 2016 [DOI: 10.1109/MeMeA.2016.7533813]
- IC-50 S. De Capitani di Vimercati, G. Livraga, V. Piuri, P. Samarati, G.A. Soares, “Supporting Application Requirements in Cloud-based IoT Information Processing”, in *Proc. of the Int. Conf. on Internet of Things and Big Data (IoTBD 2016)*, Rome, Italy, pp. 65-72, April 23-25, 2016. ISBN: 978-989-758-183-0. [DOI: 10.5220/0005877000650072]

- IC-51 M. Albanese, S. Jajodia, R. Jhawar, V. Piuri, “Dependable and Resilient Cloud Computing”, in *Proc. of the 2016 IEEE Symposium on Service-Oriented System Engineering (SOSE)*, Oxford, UK, pp. 3-3, March 29-April 2, 2016. ISBN: 978-1-5090-2253-3. [DOI: 10.1109/SOSE.2016.53]
- IC-52 A. Dineva, J.K. Tar, A.R. Varkonyi-Koczy, V. Piuri, “Adaptive Control of Underactuated Mechanical Systems using Improved Sigmoid Generated Fixed Point Transformation and Scheduling Strategy”, in *Proc. of the 2016 IEEE 14th Int. Symp. on Applied Machine Intelligence and Informatics (SAMI 2016)*, Herl’any, Slovakia, pp. 193-197, January 21-23, 2016. ISBN: 978-1-4673-8740-8. [DOI: 10.1109/SAMI.2016.7423006]
- IC-53 A. Dineva, A.R. Varkonyi-Koczy, J. K. Tar, V. Piuri, “Performance Enhancement of Fuzzy Logic Controller using Robust Fixed Point Transformation”, in *Proc. of the 15th Int. Conf. on Global Research and Education*, Springer, pp. 411-418, 2016. ISBN: 978-3-319-46490-9. [DOI: 10.1007/978-3-319-46490-9\_55]
- IC-54 A. Dineva, A.R. Varkonyi-Koczy, V. Piuri, J. K. Tar, “Point Cloud Processing with the Combination of Fuzzy Information Measure and Wavelets”, in *Proc. of the Int. Workshop on Soft Computing Applications (SOFA)*, pp. 455-461, 2016. ISBN: 978-3-319-62520-1. [DOI: 10.1007/978-3-319-62521-8\_39]
- IC-55 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Automated Border Control Systems: Biometric Challenges and Research Trends”, in *Proceedings of the 11<sup>th</sup> International Conference on Information Systems Security (ICISS 2015)*, Kolkata, India, pp. 11-20, December 16-20, 2015. ISBN: 978-3-319-26960-3. [DOI: 10.1007/978-3-319-26961-0\_2].
- IC-56 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Automatic cCassification of Acquisition Problems Affecting Fingerprint Images in Automated Border Controls”, in *Proceedings of the IEEE Symposium on Computational Intelligence in Biometrics and Identity Management (CIBIM 2015)*, Cape Town, South Africa, pp. 354-361, December 8-10, 2015. ISBN: 978-1-4799-7560-0. [DOI: 10.1109/SSCI.2015.60].
- IC-57 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Advanced Design of Automated Border Control Gates: Biometric System Techniques and Research Trends”, in *Proceedings of the IEEE International Symposium on Systems Engineering (ISSE 2015)*, Rome, Italy, pp. 412-419, September 29-30, 2015. ISBN: 978-1-4799-1920-8. [DOI: 10.1109/SysEng.2015.7302791].
- IC-58 S. Foresti, V. Piuri, G.A. Soares, “On the Use of Fuzzy Logic in Dependable Cloud Management”, in *Proc. of the 3rd IEEE Conf. on Communications and Network Security (CNS 2015)*, Florence, Italy, pp. 767-768, September 28-30, 2015 [DOI: 10.1109/CNS.2015.7346926]
- IC-59 A. Dineva, J.K. Tar, A.R. Varkonyi-Koczy, V. Piuri, “Replacement of Parameter Tuning with Simple Calculation in Adaptive Control using Sigmoid Generated Fixed Point Transformation”, in *Proc. of the 2015 IEEE 13th Int. Symp. on Intelligent Systems and Informatics (SISY 2015)*, Subotica, Serbia, pp. 173-178, September 17-19, 2015. ISBN: 978-1-4673-9388-1. [DOI: 10.1109/SISY.2015.7325374]
- IC-60 R. Donida Labati, A. Genovese, E. Muñoz, V. Piuri, F. Scotti, G. Sforza, “Improving OSB Wood Panel Production by Vision-based Systems for Granulometric Estimation”, in *Proceedings of the IEEE International Forum on Research and Technologies for Society and Industry (RTSI 2015)*, Turin, Italy, pp. 557-562, September 16-18, 2015. ISBN: 978-1-4673-8166-6. [DOI: 10.1109/RTSI.2015.7325157].
- IC-61 A. Dineva, A.R. Varkonyi-Koczy, J.K. Tar, V. Piuri, “Intelligent Neural Network Design for Nonlinear Control using Simultaneous Perturbation Stochastic Approximation (SPSA) optimization”, in *Proc. of the 14th Int. Conf. on Global Research and Education (Inter-Academia 2015)*, Budapest, Hungary, pp. 011612.1-011612.6, June 27-29, 2015. ISBN: 978-4-86348-560-0. [DOI: 10.7567/JJAPCP.4.011612].
- IC-62 R. Donida Labati, V. Piuri, R. Sassi, F. Scotti, G. Sforza, “Adaptive ECG Biometric Recognition: A Study on Re-enrollment Methods for QRS Signals,” in *Proc. of the IEEE Symposium Series on Computational Intelligence (SSCI 2016)*, Orlando, FL, USA, pp. 30-37, December 9-12, 2014.
- IC-63 . Donida Labati, V. Piuri, R. Sassi, F. Scotti, “HeartCode: A Novel Quantized ECG-based Template,” in *Proc. of the IEEE Workshop on Biometric Measurements and Systems for Security and Medical Applications (BIOMS 2014)*, pp. 86-91, Rome, Italy, October 17, 2014.

- IC-64 S. Ferrari, C. Leani, V. Piuri, “Multi-point Solar Prediction through Feed-Forward Neural Networks”, in *Proc. of the 2014 IEEE Workshop on Environmental, Energy, and Structural Monitoring Systems (EESMS 2014)*, Naples, Italy, pp. 1-5, September 17-18, 2014. ISBN: 978-1-4799-4988-5. [DOI: 10.1109/EESMS.2014.6923259]
- IC-65 S. Ferrari, M. Lazzaroni, V. Piuri, A. Salman, L. Cristaldi, M. Faifer, S. Toscani, “A computational intelligence approach to solar panel modelling”, in *Proc. of the 2014 IEEE Int. Instrumentation and Measurement Technology Conf. (I2MTC 2014)*, Montevideo, Uruguay, pp. 1261-1266, May 12-15, 2014. ISBN: 978-1-4673-6386-0. [DOI: 10.1109/I2MTC.2014.6860947]
- IC-66 T.A. Varkonyi, V. Piuri, J.K. Tar, A.R. Varkonyi-Koczy, I.J. Rudas, “Agile online-trained neural network models by using Robust Fixed Point Transformations”, in *Proc. of the 2013 IEEE 8th International Symposium on Intelligent Signal Processing (WISP 2013)*, Funchal, Portugal, pp. 48-53, September, 2013. ISBN: 978-1-4673-4543-9. [DOI: 10.1109/WISP.2013.6657481]
- IC-67 S. Ferrari, M. Lazzaroni, V. Piuri, A. Salman, L. Cristaldi, M. Faifer, “A data approximation based approach to photovoltaic systems maintenance”, in *Proc. of the 2013 IEEE Workshop on Environmental Energy and Structural Monitoring Systems (EESMS 2013)*, Trento, Italy, pp. 1-6, September, 2013. ISBN: 978-1-4799-0628-4. [DOI: 10.1109/EESMS.2013.6661694]
- IC-68 R. Jhawar, V. Piuri, “Adaptive Resource Management for Balancing Availability and Performance in Cloud Computing”, in *Proc. of the 10th International Conference on Security and Cryptography (SE-CRYPT 2013)*, Reykjavik, Iceland, pp. 254-264, July, 2013. ISBN: 978-989-8565-73-0.
- IC-69 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “Accurate 3D Fingerprint Virtual Environment for Biometric Technology Evaluations and Experiment Design”, in *Proc. of the 2013 IEEE Int. Conf. on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2013)*, Milan, Italy, pp. 43-48, July, 2013. ISBN: 978-1-4673-4701-3. [DOI: 10.1109/CIVEMSA.2013.6617393]
- IC-70 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “A Virtual Environment for the Simulation of 3D Wood Strands in Multiple View Systems for the Particle Size Measurements”, in *Proc. of the 2013 IEEE Int. Conf. on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA 2013)*, Milan, Italy, pp. 162-167, July, 2013. ISBN: 978-1-4673-4701-3. [DOI: 10.1109/CIVEMSA.2013.6617414]
- IC-71 M. Albanese, S. Jajodia, R. Jhawar, V. Piuri, “Reliable Mission Deployment in Vulnerable Distributed Systems”, in *Proc. of the 43rd Annual IEEE/IFIP International Conference on Dependable Systems and Networks Workshops (DSN-RSDA 2013)*, Budapest, Hungary, pp. 1-8, June, 2013. ISSN: 2325-6648. [DOI: 10.1109/DSNW.2013.6615514]
- IC-72 S. Ferrari, M. Lazzaroni, V. Piuri, A. Salman, L. Cristaldi, M. Faifer, “Computational intelligence models for solar radiation prediction”, in *Proc. of the 2013 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2013)*, Minneapolis, MN, USA, pp. 757-762, May, 2013. ISBN: 978-1-4673-4621-4. [DOI: 10.1109/I2MTC.2013.6555517]
- IC-73 S. Ferrari, M. Lazzaroni, V. Piuri, L. Cristaldi, M. Faifer, “Statistical models approach for solar radiation prediction”, in *Proc. of the 2013 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2013)*, Minneapolis, MN, USA, pp. 1734-1739, May, 2013. ISBN: 978-1-4673-4621-4. [DOI: 10.1109/I2MTC.2013.6555712]
- IC-74 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, “Contactless Fingerprint Recognition: A Neural Approach for Perspective and Rotation Effects Reduction”, in *Proc. of the IEEE Workshop on Computational Intelligence in Biometrics and Identity Management (CIBIM)*, Singapore, Singapore, pp. 22-30, April, 2013. ISBN: 978-1-4673-5879-8. [DOI: 10.1109/CIBIM.2013.6607909]
- IC-75 R. Jhawar, V. Piuri, P. Samarati, “Supporting Security Requirements for Resource Management in Cloud Computing”, in *Proc. of the 2012 IEEE International Conference on Computational Science and Engineering*, Paphos, Cyprus, pp. 170-177, December, 2012. ISBN: 9781467351652. [DOI: 10.1109/ICCSE.2012.32]

- IC-76 S. De Capitani di Vimercati, G. Livraga, V. Piuri, F. Scotti, "Privacy and Security in Environmental Monitoring Systems", in *Proc. of the 2012 IEEE Conference in Europe about Space and Satellite Telecommunications (ESTEL 2012)*, Rome, Italy, pp. 1-6, October, 2012. ISBN: 978-1-4673-4686-3. [DOI: 10.1109/ESTEL.2012.6400161]
- IC-77 R. Jhawar, V. Piuri, "Fault Tolerance Management in IaaS Clouds", in *Proc. of the 2012 IEEE Conference in Europe about Space and Satellite Telecommunications (ESTEL 2012)*, Rome, Italy, pp. 1-6, October, 2012. ISBN: 978-1-4673-4686-3. [DOI: 10.1109/ESTEL.2012.6400113]
- IC-78 F. Bellocchio, N.A. Borghese, S. Ferrari, V. Piuri, "Computational intelligence for surface modeling", in *Proc. of the 2012 International Conference on Neural Networks and Artificial Intelligence (ICNNAI 2012)*, Minsk, Belarus, pp. 11-16, October, 2012. ISBN: 978-985-488-924-5.
- IC-79 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Two-View Contactless Fingerprint Acquisition Systems: a Case Study for Clay Artworks", in *Proc. of the 2012 IEEE Workshop on Biometric Measurements and Systems for Security and Medical Applications (BioMS 2012)*, Salerno, Italy, pp. 1-8, September, 2012. ISBN: 978-1-4673-2722-0. [DOI: 10.1109/BIOMS.2012.6345775]
- IC-80 S. Ferrari, A. Fina, M. Lazzaroni, V. Piuri, L. Cristaldi, M. Faifer, T. Poli, "Illuminance prediction through statistical models", in *Proc. of the 2012 IEEE Workshop on Environmental Energy and Structural Monitoring Systems (EESMS 2012)*, Perugia, Italy, pp. 90-96, September, 2012. ISBN: 978-1-4673-2737-4. [DOI: 10.1109/EESMS.2012.6348406]
- IC-81 S. Ferrari, M. Lazzaroni, V. Piuri, A. Salman, L. Cristaldi, M. Rossi, T. Poli, "Illuminance prediction through Extreme Learning Machines", in *Proc. of the 2012 IEEE Workshop on Environmental Energy and Structural Monitoring Systems (EESMS 2012)*, Perugia, Italy, pp. 97-103, September, 2012. ISBN: 978-1-4673-2737-4. [DOI: 10.1109/EESMS.2012.6348407]
- IC-82 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Weight Estimation from Frame Sequences Using Computational Intelligence Techniques", in *Proc. of the 2012 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSAS 2012)*, Tianjin, China, pp. 29-34, July, 2012. ISBN: 978-1-4577-1777-2. [DOI: 10.1109/CIMSAS.2012.6269603]
- IC-83 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Virtual Environment for 3-D Synthetic Fingerprints", in *Proc. of the 2012 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS 2012)*, Tianjin, China, pp. 48-53, July, 2012. ISBN: 978-1-4577-1757-4. [DOI: 10.1109/VECIMS.2012.6273188]
- IC-84 C.A. Ardagna, E. Damiani, R. Jhawar and V. Piuri, "A Model-Based Approach to Reliability Certification of Services", in *Proc. of the 2012 IEEE International Conference on Digital Ecosystem Technologies - Complex Environment Engineering (DEST-CEE 2012)*, Campione d'Italia, Italy, pp. 1-6, June, 2012. ISBN: 978-1-4673-1701-6. [DOI: 10.1109/DEST.2012.6227913]
- IC-85 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Quality Measurement of Unwrapped Three-dimensional Fingerprints: a Neural Networks Approach", in *Proc. of the 2012 IEEE-INNS International Joint Conference on Neural Networks (IJCNN 2012)*, Brisbane, Australia, pp. 1123-1130, June, 2012. ISBN: 978-1-4673-1489-3. [DOI: 10.1109/IJCNN.2012.6252519]
- IC-86 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Low-cost Volume Estimation by Two-view Acquisitions: A Computational Intelligence Approach", in *Proc. of the 2012 IEEE-INNS International Joint Conference on Neural Networks (IJCNN 2012)*, Brisbane, Australia, pp. 1092-1099, June, 2012. ISBN: 978-1-4673-1489-3. [DOI: 10.1109/IJCNN.2012.6252515]
- IC-87 R. Jhawar, V. Piuri, M. Santambrogio, "A Comprehensive Conceptual System-Level Approach to Fault Tolerance in Cloud Computing", in *Proc. of the 2012 IEEE International Systems Conference (SysCon 2012)*, Vancouver, BC, Canada, pp. 1-5, March, 2012. ISBN: 978-1-4673-0748-2. [DOI: 10.1109/SysCon.2012.6189503]
- IC-88 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Fast 3-D Fingertip Reconstruction Using a Single Two-View Structured Light Acquisition", in *Proc. of the 2011 IEEE Workshop on Biometric Measurements and Systems for Security and Medical Applications (BioMS 2011)*, Milan, Italy, pp. 1-8, September, 2011. ISBN: 978-1-4577-0765-0. [DOI: 10.1109/BIOMS.2011.6053684]

- IC-89 A. Genovese, R. Donida Labati, V. Piuri, F. Scotti, "Wildfire smoke detection using computational intelligence techniques", in *Proc. of the IEEE 2011 International Conference on Computational Intelligence for Measurement Systems and Applications (CIMS A 2011)*, Ottawa, ON, Canada, pp. 1-6, September, 2011. ISSN: 2159-1547. [DOI: 10.1109/CIMS A.2011.6059930]
- IC-90 R. Donida Labati, V. Piuri, F. Scotti, "ALL-IDB: the Acute Lymphoblastic Leukemia Image Database for Image Processing", in *Proc. of the 2011 IEEE International Conference on Image Processing (ICIP 2011)*, Brussels, Belgium, pp. 2045-2048, September, 2011. ISBN: 978-1-4577-1302-6. [DOI: 10.1109/ICIP.2011.6115881]
- IC-91 A. Genovese, R. Donida Labati, V. Piuri, F. Scotti, "Virtual environment for synthetic smoke clouds generation", in *Proc. of the 2011 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS 2011)*, Ottawa, ON, Canada, pp. 1-6, September, 2011. ISSN: 1944-9429. [DOI: 10.1109/VECIMS.2011.6053841]
- IC-92 R. Donida Labati, V. Piuri, F. Scotti, "A neural-based minutiae pair identification method for touchless fingerprint images", in *Proc. of the 2011 IEEE Workshop on Computational Intelligence in Biometrics and Identity Management (CIBIM 2011)*, Paris, France, pp. 96-102, April, 2011. ISBN: 978-1-4244-9899-4. [DOI: 10.1109/CIBIM.2011.5949224]
- IC-93 M. Calabrese, V. Piuri, V. Di Lecce, "Holon systems as software paradigms for industrial automation and environmental monitoring", in *Proc. of the 2011 IEEE Symposium on Intelligent Agent (IA 2011)*, Paris, France, pp. 1-8, April, 2011. ISBN: 978-1-61284-059-8. [DOI: 10.1109/IA.2011.5953620]
- IC-94 A. Amato, V. Piuri, V. Di Lecce, "An image retrieval based solution for correspondence problem in binocular vision", in *Proc. of the 2010 IEEE-RIVF International Conference on Computing and Communication Technologies, Research, Innovation, and Vision for the Future*, Hanoi, Vietnam, pp. 1-6, November, 2010. ISBN: 978-1-4244-8074-6. [DOI: 10.1109/RIVF.2010.5632564 ]
- IC-95 R. Donida Labati, A. Genovese, V. Piuri, F. Scotti, "Measurement of the Principal Singular Point in Contact and Contactless Fingerprint Images by using Computational Intelligence Techniques", in *2010 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMS A 2010)*, pp. 18-23, September 6-8, 2010. ISBN: 978-1-4244-7228-4. [DOI: 10.1109/CIMS A.2010.5611769]
- IC-96 M. Barni, T. Bianchi, D. Catalano, M. Di Raimondo, R. Donida Labati, P. Failla, D. Fiore, R. Lazzeretti, V. Piuri, F. Scotti, A. Piva, "Privacy-Preserving Fingercode Authentication", in *Proc. of the 2010 ACM Workshop on Multimedia and Security*, New York, NY, USA, pp. 231-240, September, 2010. ISBN: 978-1-4503-0286-9. [DOI: 10.1145/1854229.1854270]
- IC-97 M. Barni, T. Bianchi, D. Catalano, M. Di Raimondo, R. Donida Labati, P. Failla, D. Fiore, R. Lazzeretti, V. Piuri, F. Scotti, A. Piva, "A Privacy-Compliant Fingerprint Recognition System Based on Homomorphic Encryption and Fingercode Templates", in *Proc. of the 2010 IEEE International Conference on Biometrics: Theory Applications and Systems (BTAS 2010)*, Washington, D.C., USA, pp. 1-7, September, 2010. ISBN: 978-1-4244-7580-3. [DOI: 10.1109/BTAS.2010.5634527]
- IC-98 T. Bianchi, R. Donida Labati, V. Piuri, A. Piva, F. Scotti, S. Turchi, "Implementing FingerCode-Based Identity Matching in the Encrypted Domain", in *Proc. of the 2010 IEEE Workshop on Biometric Measurements and Systems for Security and Medical Applications (BIOMS 2010)*, Taranto, Italy, pp. 15-21, September, 2010. ISBN: 978-1-4244-6302-2. [DOI: 10.1109/BIOMS.2010.5610445 ]
- IC-99 S. Ferrari, F. Bellocchio, V. Piuri, N.A. Borghese, "Multi-scale support vector regression", in *Proc. of the 2010 IEEE-INNS International Joint Conference on Neural Networks (IJCNN 2010)*, Barcelona, Spain, pp. 1-7, July, 2010. ISBN: 978-1-4244-6916-1. [DOI: 10.1109/IJCNN.2010.5596630]
- IC-100 R. Donida Labati, V. Piuri, F. Scotti, "Neural-based Quality Measurement of Fingerprint Images in Contactless Biometric Systems", in *Proc. of the 2010 IEEE-INNS International Joint Conference on Neural Networks (IJCNN 2010)*, Barcelona, Spain, pp. 1-8, July, 2010. ISSN: 1098-7576. [DOI: 10.1109/IJCNN.2010.5596694]
- IC-101 M. Lazzaroni, V. Piuri, C. Maziero, "Computer Security Aspects in Industrial Instrumentation and Measurements", in *Proc. of the 2010 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2010)*, Austin, TX, USA, pp. 1216 -1221, May, 2010. ISBN: 978-1-4244-2832-8. [DOI: 10.1109/IMTC.2010.5488137 ]

- IC-102 R. Donida Labati, V. Piuri, F. Scotti, "Neural-based Iterative Approach for Iris Detection in Iris Recognition Systems", in *IEEE Symposium on Computational Intelligence for Security and Defence Applications*, pp. 1-6, December 18, 2009. ISBN: 978-1-4244-3763-4. [DOI: 10.1109/CISDA.2009.5356533]
- IC-103 R. Donida Labati, V. Piuri, F. Scotti, "Agent-Based Image Iris Segmentation and Multiple Views Boundary Refining", in *Proc. of the 2009 IEEE International Conference on Biometrics: Theory, Applications and Systems (BTAS 2009)*, Washington, D.C., USA, pp. 1-7, November 20, 2009. ISBN: 978-1-4244-5019-0. [DOI: 10.1109/BTAS.2009.5339077]
- IC-104 R. Donida Labati, V. Piuri, F. Scotti, "A low-cost neural-based approach for wood types classification", in *Proc. of the 2009 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSAS 2009)*, Taranto, Italy, pp. 199-203, June 10, 2009 [DOI: 10.1109/CIMSAS.2009.5069947]
- IC-105 V. Di Lecce, M. Calabrese, V. Piuri, "An Ontology-based Approach to Human Telepresence", in *Proc. of the 2009 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSAS 2009)*, Taranto, Italy, pp. 56-61, May, 2009. ISBN: 978-1-4244-3819-8. [DOI: 10.1109/CIMSAS.2009.5069918]
- IC-106 V. Di Lecce, A. Amato, V. Piuri, "Data Fusion for User Presence Identification", in *Proc. of the 2009 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSAS 2009)*, Taranto, Italy, pp. 242-246, May, 2009. ISBN: 978-1-4244-3819-8. [DOI: 10.1109/CIMSAS.2009.5069958]
- IC-107 S. Cimato, M. Gamassi, V. Piuri, R. Sassi, F. Scotti, "Privacy-Aware Biometrics: Design and Implementation of a Multimodal Verification System", in *Proc. of the 2008 Annual Computer Security Applications Conference (ACSAC 2008)*, Anaheim, CA, USA, pp. 130-139, December, 2008. ISBN: 978-0-7695-3447-3. [DOI: 10.1109/ACSAC.2008.13]
- IC-108 S. Cimato, M. Gamassi, V. Piuri, R. Sassi, F. Scotti, "A Multi-Biometric Verification System for the Privacy Protection of Iris Templates", in *Proc. of the International Workshop on Computational Intelligence in Security for Information Systems*, October 23-24, 2008. ISBN: 978-3-540-88180-3. [DOI: 10.1007/978-3-540-88181-0\_29]
- IC-109 F. Bellocchio, N.A. Borghese, S. Ferrari, V. Piuri, "Kernel Regression in HRBF Networks for Surface Reconstruction", in *Proc. of the 2008 IEEE International Workshop on Haptic Audio visual Environments and Games (HAVE 2008)*, Ottawa, ON, Canada, pp. 160-165, October, 2008. ISBN: 978-1-4244-2668-3. [DOI: 10.1109/HAVE.2008.4685317 ]
- IC-110 V. Piuri, F. Scotti, "Fingerprint Biometrics via Low-cost Sensors and Webcams", in *Proc. of the 2008 IEEE International Conference on Biometrics: Theory, Applications and Systems (BTAS 2008)*, Washington, D.C., USA, pp. 1-6, October, 2008. ISBN: 978-1-4244-2729-1. [DOI: 10.1109/BTAS.2008.4699379 ]
- IC-111 S. Ferrari, V. Piuri, F. Scotti, "Virtual Environment for Granulometry Analysis", in *Proc. of the 2008 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS 2008)*, Istanbul, Turkey, pp. 156-161, July, 2008. ISBN: 978-1-4244-1927-2. [DOI: 10.1109/VECIMS.2008.4592772]
- IC-112 V. Di Lecce, A. Amato, V. Piuri, "Neural Technologies for Increasing the GPS Position Accuracy", in *Proc. of the 2008 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSAS 2008)*, Istanbul, Turkey, pp. 4-8, July, 2008. ISBN: 978-1-4244-2305-7. [DOI: 10.1109/CIMSAS.2008.4595822]
- IC-113 S. Ferrari, V. Piuri, F. Scotti, F., "Image Processing for Granulometry Analysis via Neural Networks", in *Proc. of the 2008 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSAS 2008)*, Istanbul, Turkey, pp. 28-32, July, 2008. ISBN: 978-1-4244-2305-7. [DOI: 10.1109/CIMSAS.2008.4595827 ]
- IC-114 P. Camorani, V. Piuri, F. Scotti, M. Gamassi, M. Badiali, D. Francomacaro, M. Zanasi, "A Classification Method for Wood Types Using Fluorescence Spectra," in *Proc. of the Instrumentation and Measurement Technology Conference (IMTC 2008)*, Victoria, BC, Canada, pp. 1312-1315, May 12-15, 2008.

- IC-115 S. Cimato, M. Gamassi, V. Piuri, R. Sassi, F. Cimato, F. Scotti, "A Biometric Verification System Addressing Privacy Concerns", in *Proc. of the 2007 International Conference on Computational Intelligence and Security (CIS 2007)*, Harbin, China, pp. 594-598, December, 2007. ISBN: 978-0-7695-2823-6. [DOI: 10.1109/CIS.2007.117]
- IC-116 S. Ferrari, F. Bellocchio, N.A. Borghese, V. Piuri, "Refining Hierarchical Radial Basis Function Networks", in *Proc. of the 2007 IEEE International Workshop on Haptic, Audio and Visual Environments and Games (HAVE 2007)*, Ottawa, ON, Canada, pp. 166 -170, October, 2007. ISBN: 978-1-4244-1571-7. [DOI: 10.1109/HAVE.2007.4371607 ]
- IC-117 F. Bellocchio, S. Ferrari, V. Piuri, N.A. Borghese, "Online training of Hierarchical RBF", in *Proc. of the 2007 IEEE-INNS International Joint Conference on Neural Networks (IJCNN 2007)*, Orlando, FL, USA, pp. 2159-2164, August, 2007. ISBN: 978-1-4244-1379-9. [DOI: 10.1109/IJCNN.2007.4371292 ]
- IC-118 A. Ferrante, S. Chandra, V. Piuri, "A Query Unit for the IPsec Databases", in *Proc. of the International Conference on Security and Cryptography (SECRYPT 2007)*, Barcelona, Spain, pp. 133-139, July, 2007
- IC-119 M. Calabrese, V. Di Lecce, V. Piuri, "ANN Residential Load Classifier for Intelligent DSM System", in *Proc. of the 2007 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMS A 2007)*, pp. 33-38, June, 2007. ISBN: 978-1-4244-0824-5. [DOI: 10.1109/CIMS A.2007.4362534 ]
- IC-120 A. Amato, V. Di Lecce, V. Piuri, "A New Graphical Interface For Web Search Engine", in *Proc. of the 2007 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS 2007)*, Ostuni, Italy, pp. 42-46, June, 2007. ISBN: 978-1-4244-0820-7. [DOI: 10.1109/VECIMS.2007.4373925]
- IC-121 A. Amato, V. Di Lecce, V. Piuri, "Distributed Database for Environmental Data Integration", in *Proc. of the 2007 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS 2007)*, Ostuni, Italy, pp. 47-51, June, 2007. ISBN: 978-1-4244-0820-7. [DOI: 10.1109/VECIMS.2007.4373926 ]
- IC-122 A. Amato, V. Di Lecce, V. Piuri, "A Smart Distributed Measurement Data Management System for DSM", in *Proc. of the 2007 IEEE Instrumentation and Measurement Technology Conference Proceedings (IMTC 2007)*, Warsaw, Poland, pp. 1-5, May, 2007. ISBN: 1-4244-0588-2. [DOI: 10.1109/IMTC.2007.379380 ]
- IC-123 A. Ferrante, V. Piuri, "High-level Architecture of an IPsec-Dedicated System on Chip", in *Proc. of the 2007 Euro-NGI Conference on Next Generation Internet Networks (NGI 2007)*, Trondheim, Norway, pp. 159-166, May, 2007 [DOI: 10.1109/NGI.2007.371211 ]
- IC-124 S. Cimato, M. Gamassi, V. Piuri, D. Sana, R. Sassi, F. Scotti, "Personal Identification and Verification using Multimodal Biometric Data", in *Proc. of the 2006 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety (CIHSPS 2006)*, Alexandria, VA, USA, pp. 41-45, October, 2006. ISBN: 1-4244-0745-1. [DOI: 10.1109/CIHSPS.2006.313309]
- IC-125 A. Amato, M. Calabrese, V. Di Lecce, V. Piuri, "Dynamic Simulation for Grid Computing Systems", in *Proc. of the 2006 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS 2006)*, La Coruna, Spain, pp. 64-68, July, 2006. ISBN: 1-4244-0242-5. [DOI: 10.1109/VECIMS.2006.250792]
- IC-126 A. Amato, M. Calabrese, V. Di Lecce, V. Piuri, "An Intelligent System for Decentralized Load Management", in *Proc. of the 2006 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMS A 2006)*, La Coruna, Spain, pp. 70-74, July, 2006. ISBN: 1-4244-0244-1. [DOI: 10.1109/CIMS A.2006.250752 ]
- IC-127 M. Gamassi, V. Piuri, F. Scotti, M. Roveri, "Genetic Techniques for Pattern Extraction in Particle Boards Images", in *Proc. of the 2006 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMS A 2006)*, La Coruna, Spain, pp. 129-134, July, 2006. ISBN: 1-4244-0244-1. [DOI: 10.1109/CIMS A.2006.250761 ]
- IC-128 A.V. Taddeo, A. Ferrante, V. Piuri, "Scheduling Small Packets in IPsec-based Systems", in *Proc. of the 2006 IEEE Consumer Communications and Networking Conference (CCNC 2006)*, Las Vegas, NV, USA, pp. 676-680, January, 2006 [DOI: 10.1109/CCNC.2006.1593123]



- IC-129 A. Amato, V. Di Lecce, V. Piuri, "An Image Retrieval Interface Based On Dynamic Knowledge", in *Proc. of the 2005 Conf. Computational Intelligence for Modelling, Control and Automation, and Conf. on Intelligent Agents, Web Technologies and Internet Commerce*, Wien, Austria, pp. 641-646, November, 2005. ISBN: 0-7695-2504-0. [DOI: 10.1109/CIMCA.2005.1631541 ]
- IC-130 M. Gamassi, V. Piuri, F. Scotti, "Fingerprint Local Analysis for High-Performance Minutiae Extraction", in *Proc. of the 2005 IEEE International Conference on Image Processing (ICIP 2005)*, Genoa, Italy, pp. III - 265-8, September, 2005. ISBN: 0-7803-9134-9. [DOI: 10.1109/ICIP.2005.1530379 ]
- IC-131 V. Piuri, M. Roveri, F. Scotti, "Visual Inspection of Particle Boards for Quality Assessment", in *Proc. of the 2005 IEEE International Conference on Image Processing (ICIP 2005)*, Genoa, Italy, pp. III - 521-4, September, 2005. ISBN: 0-7803-9134-9. [DOI: 10.1109/ICIP.2005.1530443]
- IC-132 C. Alippi, M. Roveri, V. Piuri, F. Scotti, "Computational Intelligence in Industrial Quality Control", in *Proc. of the 2005 IEEE International Workshop on Intelligent Signal Processing (WISP 2005)*, Faro, Portugal, pp. 4-9, September, 2005. ISBN: 0-7803-9030-x. [DOI: 10.1109/WISP.2005.1531623 ]
- IC-133 A. Amato, V. Di Lecce, C. Pasquale, V. Piuri, "Web Agents in an Environmental Monitoring System", in *Proc. of the 2005 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSAS 2005)*, Giardini Naxos - Taormina, Italy, pp. 262-265, July, 2005 [DOI: 10.1109/CIMSAS.2005.1522874]
- IC-134 B. Jang, M. Choi, N. Park, Y.B. Kim, V. Piuri, F. Lombardi, "Spare Line Borrowing Technique for Distributed Memory Cores in SoC", in *Proc. of the 2005 IEEE Instrumentation and Measurement Technology Conference (IMTC 2005)*, Ottawa, ON, Canada, pp. 43-48, May, 2005. ISBN: 0-7803-8879-8. [DOI: 10.1109/IMTC.2005.1604065 ]
- IC-135 S. Demidenko, E. Levine, V. Piuri, G.S. Gupta, "Fault-Tolerance in Micro Programmed Control: Architectures and Schematic Synthesis", in *Proc. of the 2005 IEEE Instrumentation and Measurement Technology Conference (IMTC 2005)*, Ottawa, ON, Canada, pp. 305-310, May, 2005. ISBN: 0-7803-8879-8. [DOI: 10.1109/IMTC.2005.1604123 ]
- IC-136 A. Ferrante, V. Piuri, F. Castanier, "A QoS-enabled packet scheduling algorithm for IPSec multi-accelerator based systems", in *Proc. of the 2005 ACM International Conference on Computing Frontiers (CF 2005)*, Ischia, Italy, pp. 221-229, May, 2005
- IC-137 F. Amigoni, A. Brandolini, V. Caglioti, V. Di Lecce, A. Guerriero, M. Lazzaroni, F. Lombardo, R. Ottoboni, E. Pasero, V. Piuri, D. Somenzi, "Agencies for perception in environmental monitoring", in *Proc. of the 2005 IEEE Instrumentation and Measurement Technology Conference (IMTC 2005)*, Ottawa, ON, Canada, pp. 1266-1271, May, 2005 [DOI: 10.1109/IMTC.2005.1604351]
- IC-138 A. Ferrante, V. Piuri, J. Owen, "IPSec hardware resource requirements evaluation", in *Proc. of the 2005 Euro-NGI Conference on Next Generation Internet Networks (NGI 2005)*, Rome, Italy, pp. 240-246, April, 2005. ISBN: 0-7803-8900-X. [DOI: 10.1109/NGI.2005.1431672 ]
- IC-139 M. Gamassi, V. Piuri, D. Sana, O. Scotti, F. Scotti, "A multi-modal multi-paradigm agent-based approach to design scalable distributed biometric systems", in *Proc. of the 2005 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety (CIHSPS 2005)*, Orlando, FL, USA, pp. 65-70, April, 2005. ISBN: 0-7803-9176-4. [DOI: 10.1109/CIHSPS.2005.1500613]
- IC-140 A. Amato, V. Di Lecce, V. Piuri, "Neural network based video surveillance system", in *Proceedings of the 2005 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety, 2005 (CIHSPS 2005)*, Orlando, FL, USA, pp. 85-89, March, 2005 [DOI: 10.1109/CIHSPS.2005.1500617]
- IC-141 V. Di Lecce, C. Pasquale, V. Piuri, "Agents architecture to support environmental data knowledge management", in *Proc. of the 2004 IEEE International Conference on Software, Telecommunications and Computer Networks (SOFTCOM 2004)*, Split e Dubrovnik, Croatia, pp. 293-297, October, 2004
- IC-142 U. Boiko, A. Ferrante, A. Lo Duca, V. Piuri, "A methodology for testing IPSec-based systems", in *Proc. of the 2004 IEEE International Conference on Software, Telecommunications and Computer Networks (SOFTCOM 2004)*, Split e Dubrovnik, Croatia, pp. 22-26, October, 2004

- IC-143 S. Ferrari, I. Frosio, V. Piuri, N.A. Borghese, "Enhanced vector quantization for data reduction and filtering", in *Proc. of the International Symposium on 3D Data Processing, Visualization and Transmission (3DPVT 2004)*, Thessaloniki, Greece, pp. 470-477, September, 2004. ISBN: 0-7695-2223-8. [DOI: 10.1109/TDPVT.2004.1335275]
- IC-144 F. Castanier, A. Ferrante, V. Piuri, "A packet scheduling algorithm for IPSec multi-accelerator based systems", in *Proc. of the IEEE International Conference on Application-Specific Systems, Architectures and Processors (ASAP 2004)*, Galveston, TX, USA, pp. 387-397, September, 2004. ISBN: 0-7695-2226-2. [DOI: 10.1109/ASAP.2004.1342487]
- IC-145 A. Amato, V. Di Lecce, V. Piuri, "Knowledge based video surveillance system", in *Proc. of the 2004 International Conference on Computer, Theory and Application (ICCTA 2004)*, Alexandria, Egypt, September, 2004
- IC-146 V. Di Lecce, C. Pasquale, V. Piuri, "Agent-based communication for an environmental monitoring application", in *Proc. of the 2004 International Conference on Computer, Theory and Application (ICCTA 2004)*, Alexandria, Egypt, pp. 28-30, September, 2004
- IC-147 M. Gamassi, V. Piuri, D. Sana, F. Scotti, "A high-level optimum design methodology for multimodal biometric systems", in *Proc. of the 2004 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety (CHISPS 2004)*, pp. 117-124, July, 2004. ISBN: 0-7803-8381-8. [DOI: 10.1109/CIHSPS.2004.1360221]
- IC-148 A. Amato, V. Di Lecce, V. Piuri, "An interface for semantic browsing of an images database", in *Proc. of the 2004 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS 2004)*, Boston, MA, USA, pp. 67-71, July, 2004. ISBN: 0-7803-8339-7. [DOI: 10.1109/VECIMS.2004.1397189]
- IC-149 V. Di Lecce, C. Pasquale, V. Piuri, "A basic ontology for multi agent system communication in an environmental monitoring system", in *Proc. of the 2004 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSA 2004)*, Boston, MA, USA, pp. 45-50, July, 2004. ISBN: 0-7803-8341-9. [DOI: 10.1109/CIMSA.2004.1397228]
- IC-150 V. Piuri, F. Scotti, "Morphological classification of blood leucocytes by microscope images", in *Proc. of the 2004 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSA 2004)*, Boston, MA, USA, pp. 103-108, July, 2004. ISBN: 0-7803-8341-9. [DOI: 10.1109/CIMSA.2004.1397242]
- IC-151 D. Ardagna, C. Francalanci, V. Piuri, F. Scotti, "Evolutionary Design of Information Systems Architectures", in *Proc. of the 2004 International Conference on Artificial Intelligence and Soft Computing (ICAISC 2004)*, Zakopane, Poland, pp. 1-8, June, 2004 [DOI: 10.1007/978-3-540-24844-6\_1]
- IC-152 S. Ferrari, I. Frosio, V. Piuri, N.A. Borghese, "The accuracy of the HRBF networks", in *Proc. of the 2004 IEEE Instrumentation and Measurement Technology Conference (IMTC 2004)*, Como, Italy, pp. 482-486, May, 2004. ISBN: 0-7803-8248-X. [DOI: 10.1109/IMTC.2004.1351093]
- IC-153 S. Demidenko, E. Levine, V. Piuri, G.S. Gupta, "On test data compaction using linear cycle registers", in *Proc. of the 2004 IEEE Instrumentation and Measurement Technology Conference (IMTC 2004)*, Como, Italy, pp. 1645-1650, May, 2004. ISBN: 0-7803-8248-X. [DOI: 10.1109/IMTC.2004.1351397]
- IC-154 M. Gamassi, M. Lazzaroni, M. Misino, V. Piuri, D. Sana, F. Scotti, "Accuracy and performance of biometric systems", in *Proc. of the 2004 IEEE Instrumentation and Measurement Technology Conference (IMTC 2004)*, Como, Italy, pp. 510-515, May, 2004. ISBN: 078038248X. [DOI: 10.1109/IMTC.2004.1351099]
- IC-155 V. Di Lecce, V. Piuri, "Information and knowledge sharing in a distributed system: application to environmental monitoring system", in *Proc. of the 2003 IEEE Midwest Symposium on Circuits and Systems (MWSCAS 2003)*, Cairo, Egypt, pp. 909-911, December, 2003. ISBN: 0-7803-8294-3. [DOI: 10.1109/MWSCAS.2003.1562434]
- IC-156 V. Piuri, M. Roveri, "A simulation environment for concatenated and turbo codes analysis and optimization", in *Proc. of the 2003 IEEE Midwest Symposium on Circuits and Systems (MWSCAS 2003)*, Cairo, Egypt, pp. 1210-1212, December, 2003. ISBN: 0-7803-8294-3. [DOI: 10.1109/MWSCAS.2003.1562511]

- IC-157 T. Feng, N. Park, Y.B. Kim, V. Piuri, "Yield modeling and analysis of a clockless asynchronous wave pipeline with pulse faults", in *Proc. of the 2003 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT 2003)*, Cambridge, MA, USA, pp. 34-41, November, 2003. ISBN: 0-7695-2042-1. [DOI: 10.1109/DFTVS.2003.1250093 ]
- IC-158 G. Bertoni, L. Breveglieri, I. Koren, P. Maistri, V. Piuri, "Detecting and locating faults in VLSI implementations of the Advanced Encryption Standard", in *Proc. of the 2003 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT 2003)*, Cambridge, MA, USA, pp. 105-113, November, 2003. ISBN: 0-7695-2042-1. [DOI: 10.1109/DFTVS.2003.1250101 ]
- IC-159 N.A. Borghese, S. Ferrari, V. Piuri, "A methodology for surface reconstruction based on hierarchical models", in *Proc. of the 2003 IEEE International Workshop on Haptic, Audio and Visual Environments and Their Applications (HAVE 2003)*, Ottawa, ON, Canada, pp. 119-124, September, 2003. ISBN: 0-7803-8108-4. [DOI: 10.1109/HAVE.2003.1244736 ]
- IC-160 M. Choi, N. Park, F. Lombardi, Y.B. Kim, V. Piuri, "Optimal spare utilization in repairable and reliable memory cores", in *Proc. of the 2003 International Workshop on Memory Technology, Design and Testing (MTDT 2003)*, San Jose, CA, USA, pp. 64-71, July, 2003. ISBN: 0-7695-2004-9. [DOI: 10.1109/MTDT.2003.1222363]
- IC-161 N.A. Borghese, S. Ferrari, V. Piuri, "Real-time surface meshing through HRBF networks", in *Proc. of the 2003 IEEE-INNS International Joint Conference on Neural Networks (IJCNN 2003)*, Portland, OR, USA, pp. 1361-1366, July, 2003. ISBN: 0-7803-7898-9. [DOI: 10.1109/IJCNN.2003.1223894]
- IC-162 A. Amato, G. Andria, T. Delvecchio, V. Di Leece, A. Guerriero, A.M.I. Lanzolla, C. Pasquale, V. Piuri, "Symbolic interface for pollutant forecast. An evaluation", in *Proc. of the 2003 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VE-CIMS 2003)*, Lugano, Switzerland, pp. 85-89, July, 2003. ISBN: 0-7803-7785-0. [DOI: 10.1109/VE-CIMS.2003.1227035 ]
- IC-163 C. Alippi, G. D'Angelo, M. Matteucci, G. Pasquettaz, V. Piuri, F. Scotti, "Composite techniques for quality analysis in automotive laser welding", in *Proc. of the 2003 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMS 2003)*, Lugano, Switzerland, pp. 72- 77, July, 2003. ISBN: 0-7803-7783-4. [DOI: 10.1109/CIMS.2003.1227205 ]
- IC-164 A. Amato, G. Andria, T. Delvecchio, V. Di Leece, A. Guerriero, A.M.L. Lanzolla, C. Pasquale, V. Piuri, "Analysis and metrological characterization of the state of atmospheric pollution", in *Proc. of the 2003 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMS 2003)*, Lugano, Switzerland, pp. 140-145, July, 2003. ISBN: 0-7803-7783-4. [DOI: 10.1109/CIMS.2003.1227217]
- IC-165 G. Bertoni, L. Breveglieri, I. Koren, P. Maistri, V. Piuri, "Concurrent fault detection in a hardware implementation of the RC5 encryption algorithm", in *Proc. of the 2003 IEEE International Conference on Application-Specific Systems, Architectures, and Processors (ASAP 2003)*, The Hague, The Netherlands, pp. 423- 432, June, 2003. ISBN: 0-7695-1992-X. [DOI: 10.1109/ASAP.2003.1212865 ]
- IC-166 M. Choi, N. Park, V. Piuri, Y.B. Kim, F. Lombardi, "Evaluating the repair of system-on-chip (soc) using connectivity", in *Proc. of the 2003 IEEE Instrumentation and Measurement Technology Conference (IMTC 2003)*, Vail, CO, USA, pp. 309-314, May, 2003. ISBN: 0-7803-7705-2. [DOI: 10.1109/IMTC.2003.1208172 ]
- IC-167 N.A. Borghese, S. Ferrari, V. Piuri, "Real-time surface reconstruction through HRBF networks", in *Proc. of the 2002 IEEE International Workshop on Haptic Virtual Environments and Their Applications (HAVE 2002)*, Ottawa, ON, Canada, pp. 19- 24, November, 2002. ISBN: 0-7803-7635-8. [DOI: 10.1109/HAVE.2002.1106908]
- IC-168 G. Bertoni, L. Breveglieri, I. Koren, P. Maistri, V. Piuri, "A parity code based fault detection for an implementation of the Advanced Encryption Standard", in *Proc. of the 2002 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT 2002)*, Vancouver, BC, Canada, pp. 51-59, November, 2002. ISBN: 0-7695-1831-1. [DOI: 10.1109/DFTVS.2002.1173501]

- IC-169 M. Choi, N. Park, F. Lombardi, Y.B. Kim, V. Piuri, "Balanced redundancy utilization in embedded memory cores for dependable systems", in *Proc. of the 2002 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT 2002)*, Vancouver, BC, Canada, pp. 419-427, November, 2002. ISBN: 0-7695-1831-1. [DOI: 10.1109/DFTVS.2002.1173540 ]
- IC-170 G. Bertoni, L. Breveglieri, I. Koren, P. Maistri, V. Piuri, "On the propagation of faults and their detection in a hardware implementation of the Advanced Encryption Standard", in *Proc. of the 2002 IEEE International Conference on Application-Specific Systems, Architectures and Processors (ASAP 2002)*, San Jose, CA, USA, pp. 303-312, July, 2002. ISBN: 0-7695-1712-9. [DOI: 10.1109/ASAP.2002.1030729 ]
- IC-171 C. Alippi, E. Casagrande, M. Fumagalli, F. Scotti, V. Piuri, L. Valsecchi, "An embedded system methodology for real-time analysis of railways track profile", in *Proc. of the 2002 IEEE Instrumentation and Measurement Technology Conference (IMTC 2002)*, Anchorage, AK, USA, pp. 747-751, May, 2002. ISBN: 0-7803-7218-2. [DOI: 10.1109/IMTC.2002.1006935]
- IC-172 A. Choi, N. Park, F.J. Meyer, F. Lombardi, V. Piuri, "Reliability measurement of fault-tolerant onboard memory system under fault clustering", in *Proc. of the 2002 IEEE Instrumentation and Measurement Technology Conference (IMTC 2002)*, Anchorage, AK, USA, pp. 1161-1166, May, 2002. ISBN: 0-7803-7218-2. [DOI: 10.1109/IMTC.2002.1007121]
- IC-173 C. Alippi, V. Bono, V. Piuri, F. Scotti, "Toward real-time quality analysis measurement of metal laser cutting", in *Proc. of the 2002 IEEE International Symposium on Virtual and Intelligent Measurement Systems (VIMS 2002)*, Girdwood, AK, USA, pp. 39-44, May, 2002. ISBN: 0-7803-7344-8. [DOI: 10.1109/VIMS.2002.1009354 ]
- IC-174 G. Bertoni, L. Breveglieri, I. Koren, V. Piuri, "Fault detection in the advanced encryption standard", in *Proc. of the Euromicro International Conference on Massively Parallel Computing Systems (MPCS 2002)*, Ischia, Italy, pp. 92-97, April, 2002
- IC-175 M. Choi, N. Park, K.M. Gorge, V. Piuri, "Redundancy optimization of fault tolerant mass storage memory for massively parallel computing systems", in *Proc. of the Euromicro International Conference on Massively Parallel Computing Systems (MPCS 2002)*, Ischia, Italy, pp. 153-161, April, 2002
- IC-176 G. Bertoni, L. Breveglieri, F. Cassoli, V. Piuri, "Implementing ghost bit based algorithms for elliptic curve cryptosystems", in *Proc. of the Euromicro International Conference on Massively Parallel Computing Systems (MPCS 2002)*, Ischia, Italy, pp. 105-111, April, 2002
- IC-177 S. Demidenko, N. Lord, A. Van de Goor, V. Piuri, "Quasi on-line testing of embedded random access memory", in *Proc. of the Euromicro International Conference on Massively Parallel Computing Systems (MPCS 2002)*, Ischia, Italy, pp. 147-152, April, 2002
- IC-178 A. Antola, V. Piuri, M. Sami, "On-line diagnosis and reconfiguration of FPGA systems", in *Proc. of the 2002 IEEE International Workshop on Electronic Design, Test and Applications (DELTA 2002)*, Christchurch, New Zealand, pp. 291-296, January, 2002. ISBN: 0-7695-1453-7. [DOI: 10.1109/DELTA.2002.994633]
- IC-179 W. Allen, D. Bailey, S. Demidenko, V. Piuri, "Test chirp signal generation using spectral warping", in *Proc. of the 2002 IEEE International Workshop on Electronic Design, Test and Applications (DELTA 2002)*, Christchurch, New Zealand, pp. 492-495, January, 2002. ISBN: 0-7695-1453-7. [DOI: 10.1109/DELTA.2002.994682]
- IC-180 W. Allen, D. Bailey, S. Demidenko, V. Piuri, "Analysis and implementation of a spectral warping network", in *Proc. of the 2001 IEEE International Symposium on Integrated Circuits, Devices and Systems*, Singapore, pp. 492-496, September, 2001
- IC-181 S. Demidenko, E. Levine, V. Piuri, "LFRS-based fault diagnosis for circuits with a feedback loop", in *Proc. of the 2001 IEEE International Symposium on Integrated Circuits, Devices and Systems*, Singapore, pp. 197-199, September, 2001
- IC-182 W. Fornaciari, V. Piuri, A. Prestileo, V. Zaccaria, "An agent-based approach to full interoperability and allocation transparency in distributed file systems", in *Proc. of the 2001 ACM-IEEE International Workshop on Mobile Agents for Telecommunication Applications (MATA 2001)*, Montreal, QC, Canada, pp. 153-162, August, 2001

- IC-183 C. Alippi, V. Piuri, F. Scotti, "A High-level Synthesis of Embedded Composite Systems for Environmental Applications", in *Proc. of the 2001 IEEE International Workshop on Advanced Environmental Sensing and Monitoring Technologies*, Milan, Italy, pp. 15-20, June, 2001
- IC-184 G. Roggero, F. Scotti, F. Soncini Sessa, V. Piuri, "Quality analysis measurement for laser cutting", in *Proc. of the 2001 IEEE International Workshop on Virtual and Intelligent Measurement Systems (VIMS 2001)*, Budapest, Hungary, pp. 41-44, May, 2001. ISBN: 0-7803-6568-2. [DOI: 10.1109/VIMS.2001.924898 ]
- IC-185 M. Choi, N. Park, F. Lombardi, V. Piuri, "Quality enhancement of reconfigurable multichip module systems by redundant utilization", in *Proc. of the 2001 IEEE Instrumentation and Measurement Technology Conference (IMTC 2001)*, Budapest, Hungary, pp. 204-209, May, 2001. ISBN: 0-7803-6646-8. [DOI: 10.1109/IMTC.2001.928813]
- IC-186 C. Alippi, P. Braione, V. Piuri, F. Scotti, "A methodological approach to multisensor classification for innovative laser material processing units", in *Proc. of the 2001 IEEE Instrumentation and Measurement Technology Conference (IMTC 2001)*, Budapest, Hungary, pp. 1762-1767, May, 2001. ISBN: 0-7803-6646-8. [DOI: 10.1109/IMTC.2001.929503 ]
- IC-187 J.-H. Kwak, V. Piuri, E.E. Jr. Swartzlander, "Time-shared TMR for fault-tolerant CORDIC processors", in *Proc. of the 2001 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2001)*, Salt Lake City, UT, USA, pp. 1241-1244, May, 2001. ISBN: 0-7803-7041-4. [DOI: 10.1109/ICASSP.2001.941149]
- IC-188 J.-H. Kwak, V. Piuri, E.E., Jr. Swartzlander, "Fault-tolerant high-performance CORDIC processors", in *Proc. of the 2000 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT 2000)*, Yamanashi, Japan, pp. 164-172, October, 2000. ISBN: 0-7695-0719-0. [DOI: 10.1109/DFTVS.2000.887154]
- IC-189 S.N. Demidenko, E.M. Levine, V. Piuri, "Synthesis of on-line testing control units: flow graph coding/monitoring approach", in *Proc. of the 2000 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT 2000)*, Yamanashi, Japan, pp. 266-274, October, 2000. ISBN: 0-7695-0719-0. [DOI: 10.1109/DFTVS.2000.887166]
- IC-190 C. Alippi, S. Ferrari, V. Piuri, "A methodology for example-based specification and design", in *Proc. of the 2000 IEEE-INNS-ENNS International Joint Conference on Neural Networks (IJCNN 2000)*, Como, Italy, pp. 535-540, July, 2000. ISBN: 0-7695-0619-4. [DOI: 10.1109/IJCNN.2000.861363]
- IC-191 N. Park, F. Lombardi, V. Piuri, "Testing and evaluating the quality-level of stratified multichip module instrumentation", in *Proc. of the 2000 IEEE Instrumentation and Measurement Technology Conference (IMTC 2000)*, Baltimore, MD, USA, pp. 1578-1583, May, 2000. ISBN: 0-7803-5890-2. [DOI: 10.1109/IMTC.2000.848737 ]
- IC-192 S. Ferrari, N.A. Borghese, V. Piuri, "Multi-resolution models for data processing: an experimental sensitivity analysis", in *Proc. of the 2000 IEEE Instrumentation and Measurement Technology Conference (IMTC 2000)*, Baltimore, MD, USA, pp. 1056-1060, May, 2000. ISBN: 0-7803-5890-2. [DOI: 10.1109/IMTC.2000.848902 ]
- IC-193 C. Alippi, G.M. Bertoni, G.M. Diani, V. Piuri, F. Scotti, "A composite system design methodology for instrumentation and embedded system", in *Proc. of the 2000 IEEE Instrumentation and Measurement Technology Conference (IMTC 2000)*, Baltimore, MD, USA, pp. 1086-1089, May, 2000. ISBN: 0-7803-5890-2. [DOI: 10.1109/IMTC.2000.848917 ]
- IC-194 C. Alippi, V. Piuri, F. Scotti, "A Methodology to solve the Performance/Complexity Trade-off in RBF Neural Networks", in *Proc. of the 2000 IEEE International Workshop on Virtual and Intelligent Measurement Systems (VIMS 2000)*, Annapolis, MD, USA, pp. 147-150, April, 2000
- IC-195 W. Fornaciari, V. Piuri, "Virtualization of FPGA via segmentation", in *Proc. of the 2000 ACM International Symposium on FPGA (FPGA 2000)*, Monterey, CA, USA, pp. 222, February, 2000 [DOI: 10.1145/329166.329226]
- IC-196 V. Piuri, E.E., Jr. Swartzlander, "Time-shared modular redundancy for fault-tolerant FFT processors", in *Proc. of the 1999 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT '99)*, Albuquerque, NM, USA, pp. 265-273, November, 1999. ISBN: 0-7695-0325-x. [DOI: 10.1109/DFTVS.1999.802893]

- IC-197 M. Alderighi, S. D'Angelo, V. Piuri, G.R. Sechi, "Implementing a self-checking neural system for photon event identification by SRAM-based FPGAs", in *Proc. of the 1999 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT '99)*, Albuquerque, NM, USA, pp. 274-282, November, 1999. ISBN: 0-7695-0325-x. [DOI: 10.1109/DFTVS.1999.802894]
- IC-198 S. Demidenko, V. Piuri, "Using spectral warping for instrumentation and measurements in mixed-signal testing", in *Proc. of the 1999 IEEE Instrumentation and Measurement Technology Conference (IMTC'99)*, Venice, Italy, pp. 1547-1552, May, 1999. ISSN: 1091-5281. [DOI: 10.1109/IMTC.1999.776085]
- IC-199 L. Benetazzo, M. Bertocco, F. Ferraris, A. Ferrero, C. Offelli, M. Parvis, V. Piuri, "A Web-based distributed virtual educational laboratory", in *Proc. of the 1999 IEEE Instrumentation and Measurement Technology Conference (IMTC'99)*, Venice, Italy, pp. 1851-1856, May, 1999. ISBN: 0-7803-5276-9. [DOI: 10.1109/IMTC.1999.776141]
- IC-200 C. Alippi, E. Casagrande, F. Scotti, V. Piuri, "Composite real-time image processing for railways track profile measurement", in *Proc. of the 1999 IEEE Instrumentation and Measurement Technology Conference (IMTC'99)*, Venice, Italy, pp. 1283-1288, May, 1999. ISSN: 1091-5281. [DOI: 10.1109/IMTC.1999.777061]
- IC-201 C. Alippi, F. Lullia, S. Malandrino, V. Piuri, "A neural network based algorithm to classify the ageing level of catalytic converters", in *Proc. 1999 IEEE International Workshop on Virtual and Intelligent Measurement Systems (VIMS'99)*, Venice, Italy, pp. 68-74, May, 1999
- IC-202 N.A. Borghese, S. Ferrari, V. Piuri, "Local Wavelet decomposition and its application to face reconstruction", in *Proc. of the Workshop on Neural Nets (WIRN'99)*, Vietri sul Mare, Italy, pp. 184-189, May, 1999
- IC-203 A. Antola, V. Piuri, M. Sami, "High-level synthesis of data paths with concurrent error detection", in *Proc. of 1998 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT'98)*, Austin, TX, USA, pp. 292-300, November, 1998. ISBN: 0-8186-8832-7. [DOI: 10.1109/DFTVS.1998.732178]
- IC-204 S. Demidenko, V. Piuri, V. Yarmolik, A. Shmidman, "BIST module for mixed-signal circuits", in *Proc. of 1998 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT'98)*, Austin, TX, USA, pp. 349-352, November, 1998. ISBN: 0-8186-8832-7. [DOI: 10.1109/DFTVS.1998.732185]
- IC-205 W. Fornaciari, V. Piuri, "General methodologies to virtualize FPGAs in Hw/Sw systems", in *Proc. of 1998 IEEE Midwest Symposium on Circuits and Systems (MWSCAS'98)*, Notre Dame, IN, USA, pp. 90-93, August, 1998. ISBN: 0-8186-8914-5. [DOI: 10.1109/MWSCAS.1998.759442]
- IC-206 C. Francalanci, V. Piuri, "Designing information technology architectures: a cost-oriented methodology", in *Proc. of the 1998 European Conference on Information Systems*, Aix-en-Provence, France, pp. 953-968, June, 1998
- IC-207 C. Alippi, C. De Russis, V. Piuri, "A fine control of the air-to-fuel ratio with recurrent neural networks", in *Proc. of the 1998 IEEE Instrumentation and Measurement Technology Conference (IMTC'98)*, St. Paul, MN, USA, pp. 924-929, May, 1998. ISBN: 0-7803-4797-8. [DOI: 10.1109/IMTC.1998.676859]
- IC-208 C. Alippi, F. Casamatta, V. Piuri, P. Scarpellini, "Neural equivalents of electrical power systems", in *Proc. 1998 IEEE Int'l Workshop on Emerging Technologies, Intelligent Measurement and Virtual Systems for Instrumentation and Measurement (ETIMVIS'98)*, St. Paul, MN, USA, pp. 30-39, May, 1998
- IC-209 A. Ferrero, V. Piuri, "A simulation tool for virtual laboratory experiments in a www environment", in *Proc. of the 1998 IEEE Instrumentation and Measurement Technology Conference (IMTC'98)*, St. Paul, MN, USA, pp. 102-107, May, 1998 [DOI: 10.1109/IMTC.1998.679722]
- IC-210 W. Fornaciari, V. Piuri, F. Salice, "From behavior to VHDL: a CAD environment for SPNNs", in *Proc. of the Workshop on Neural Nets (WIRN'98)*, Vietri sul Mare, Italy, pp. 334-339, May, 1998
- IC-211 L. Breveglieri, V. Piuri, E.E. Swartzlander, Jr., "A serial discrete wavelet transform processor", in *Proc. of the 1998 IEEE Conference on Computational Engineering in Systems Applications (CESA'98)*, Nebel-Hammamet, Tunisia, pp. 306-311, April, 1998
- IC-212 W. Fornaciari, V. Piuri, "Virtual FPGAs: some steps beyond the physical barriers", in *Proc. of the 1998 IEEE Reconfigurable Architectures Workshop (RAW'98)*, Orlando, FL, USA, pp. 7-12, April, 1998

- IC-213 A. Antola, V. Piuri, M. Sami, "A low-redundancy approach to semi-concurrent error detection in data paths", in *Proc. of the 1998 Design, Automation and Test in Europe (DATE'98)*, Paris, France, pp. 266-272, February, 1998. ISBN: 0-8186-8359-7. [DOI: 10.1109/DATE.1998.655866]
- IC-214 A. Antola, V. Piuri, M. Sami, "Semi-concurrent error detection in data paths", in *Proc. of the 1997 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT'97)*, Paris, France, pp. 298-306, October, 1997. ISBN: 0-8186-8168-3. [DOI: 10.1109/DFTVS.1997.628337]
- IC-215 L. Breveglieri, V. Piuri, M. Rona and E.E., Jr. Swartzlander, "A low-latency serial architecture for the 1-D discrete wavelet transform", in *Proc. of the 1997 IEEE International Conference on Innovative Systems in Silicon (ISIS'97)*, Austin, TX, USA, pp. 300-309, October, 1997. ISBN: 0-7803-4276-3. [DOI: 10.1109/ICISS.1997.630273]
- IC-216 V. Yarmolik, Y. Klimets, S. Demidenko, V. Piuri, "Transparent tests for semiconductor memories", in *Proc. of the International Symposium on IC Technology, Systems and Applications (ISIC'97)*, Singapore, pp. 192-195, September, 1997
- IC-217 O. Maeran, V. Piuri, G. Storti Gajani, "A Speech Recognition System Based on Phonemes Neural Analysis", in *Proc. of the 1997 IMACS World Congress (IMACS'97)*, Berlin, Germany, pp. 355-360, August, 1997
- IC-218 L. Breveglieri, L. Dadda, V. Piuri, "Fast arithmetic and fault tolerance in the FERMI system", in *Proc. of the 1997 IEEE International Conference on Application-Specific Systems, Architectures and Processors (ASAP'97)*, Zurich, Switzerland, pp. 374-383, July, 1997. ISBN: 0-8186-7959-X. [DOI: 10.1109/ASAP.1997.606842]
- IC-219 S. Wang, V. Piuri, E.E., Jr. Swartzlander, "Merged scaling multiplication CORDIC algorithm", in *Proc. of the 1997 IEEE International Symposium on Circuits and Systems (ISCAS'97)*, Hong Kong, pp. 2581-2584, June, 1997. ISBN: 0-7803-3583-X. [DOI: 10.1109/ISCAS.1997.612852 ]
- IC-220 A. Pelagotti, V. Piuri, "Neural spectral composition for function approximation", in *Proc. of the 1997 IEEE International Conference on Neural Networks (ICNN'97)*, Houston, TX, USA, pp. 860-864, June, 1997. ISBN: 0-7803-4122-8. [DOI: 10.1109/ICNN.1997.616137]
- IC-221 C. Alippi, V. Piuri, C. De Russis, "Neural regression of parameters affecting the fuel film dynamic", in *Proc. of the ISATA International Symposium on Automotive Technologies and Automation (ISATA'97)*, Florence, Italy, pp. 287-294, June, 1997
- IC-222 C. Alippi, V. Piuri, "Neural modelling of dynamic systems with non-measurable state variables", in *Proc. of the 1997 IEEE Instrumentation and Measurement Technology Conference (IMTC'97)*, Ottawa, ON, Canada, pp. 1100-1105, May, 1997. ISBN: 0-7803-3747-6. [DOI: 10.1109/IMTC.1997.612371 ]
- IC-223 C. Alippi, V. Piuri, "Training Recurrent Neural Networks with Genetic Based Algorithms", in *Proc. of the IEEE International Workshop on Emergent Technologies and Virtual Systems in Instrumentation and Measurement (ET&VSIM'97)*, Niagara Falls, Canada, pp. 11-18, May, 1997
- IC-224 M. Alderighi, E.L. Gummati, V. Piuri, G.R. Sechi, "A FPGA-based implementation of a fault tolerant neural architecture for photon identification", in *Proc. of the 1997 ACM International Symposium on FPGA (FPGA'97)*, Monterey, CA, USA, pp. 166-172, February, 1997
- IC-225 O. Maeran, V. Piuri, G. Storti Gajani, "Speech recognition through phoneme segmentation and neural classification", in *Proc. of the 1997 IEEE Instrumentation and Measurement Technology Conference (IMTC'97)*, Ottawa, ON, Canada, pp. 1215-1220, 1997. ISBN: 0-7803-3747-6. [DOI: 10.1109/IMTC.1997.612392]
- IC-226 S. Demidenko, V. Piuri, "On-line testing in digital neural networks", in *Proc. of the 1996 IEEE Asian Test Symposium (ATS'96)*, Hsinchu, Taiwan, pp. 295-300, November, 1996. ISBN: 0-8186-7478-4. [DOI: 10.1109/ATS.1996.555174]
- IC-227 A. Antola, V. Piuri, M. Sami, "Optimising high-level synthesis for self-checking arithmetic circuits", in *Proc. of the 1996 IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT'96)*, Boston, MA, USA, pp. 268-276, November, 1996. ISBN: 0-8186-7545-4. [DOI: 10.1109/DFTVS.1996.572033]

- IC-228 L. Dadda, V. Piuri, F. Salice, "The quasi-Booth multiplier", in *Proc. of the 1996 IEEE International Conference on Innovative Systems in Silicon (ISIS'96)*, Austin, TX, USA, pp. 36-45, October, 1996. ISBN: 0-7803-3639-9. [DOI: 10.1109/ICISS.1996.552409 ]
- IC-229 D.L. Fuschi, V. Piuri, "META: multimedia environment for training applications", in *Proc. of the 1996 IEEE International Conference on Systems, Man, and Cybernetics (SMC'96)*, Beijing, China, pp. 2898-2903, October, 1996 [DOI: 10.1109/ICSMC.1996.561402 ]
- IC-230 A. Antola, V. Piuri, M. Sami, "A high-level synthesis approach to optimum design of self-checking circuits", in *Proc. of the European Design Automation Conference (EURO-DAC'96)*, Geneva, Switzerland, pp. 382-387, September, 1996
- IC-231 C. Alippi, V. Piuri, "Neural methodology for prediction and identification of nonlinear dynamic systems", in *Proc. of the 1996 IEEE International Workshop on Neural Networks for Identification, Control, Robotics, and Signal/Image Processing (NICROSP'96)*, Venice, Italy, pp. 305-313, August, 1996. ISBN: 0-8186-7456-3. [DOI: 10.1109/NICRSP.1996.542773 ]
- IC-232 S. Wang, V. Piuri, E.E., Jr. Swartzlander, "A unified view of CORDIC processor design", in *Proc. of the 1996 IEEE Midwest Symposium on Circuits and Systems (MWSCAS'96)*, Ames, IO, USA, pp. 852-855, August, 1996. ISBN: 0-7803-3636-4. [DOI: 10.1109/MWSCAS.1996.588050]
- IC-233 C. Alippi, V. Piuri, "A neural approach to control the automotive fuel-injection system", in *Proc. of the 1996 IEEE Multiconference on Computational Engineering in Systems Applications (CESA'96)*, Lille, France, pp. 1193-1198, July, 1996
- IC-234 C. Alippi, V. Piuri, S. Quatela, "Neural prediction in power plants: the case of the steam pressures", in *Proc. of the IEEE Multiconference on Computational Engineering in Systems Applications (CESA'96)*, Lille, France, pp. 232-237, July, 1996
- IC-235 C. Alippi, A. Cori, V. Piuri, F. Pretolani, "Monitoring and real-time simulation of power plants: a neural-based environment", in *Proc. of the 1996 IEEE Instrumentation and Measurement Technology Conference (IMTC'96)*, Brussels, Belgium, pp. 847-852, June, 1996. ISBN: 0-7803-3312-8. [DOI: 10.1109/IMTC.1996.507288]
- IC-236 C. Citterio, A. Pelagotti, V. Piuri, L. Rocca, "Spectral approximation of functions by using three-layered feedforward neural networks", in *Proc. of the 1996 IEEE International Conference on Neural Networks (ICNN'96)*, Washington, D.C., USA, pp. 1830-1834, June, 1996. ISBN: 0-7803-3210-5. [DOI: 10.1109/ICNN.1996.549179]
- IC-237 C. Alippi, V. Piuri, "The use of neural technologies for identification of non-linear dynamic systems", in *Proc. of the 1996 IEEE International Workshop on Emerging Technologies for Instrumentation and Measurement (ETIM'96)*, Como, Italy, pp. 1-9, June, 1996
- IC-238 C. Alippi, F. Casamatta, L. Furlan, A. Pelagotti, V. Piuri, "NESS: a simulation environment for behavioral design of neural networks for prediction and control", in *Proc. of the 1996 IEEE International Symposium on Circuits and Systems (ISCAS'96)*, Atlanta, GA, USA, pp. 345-348, May, 1996. ISBN: 0-7803-3073-0. [DOI: 10.1109/ISCAS.1996.541604]
- IC-239 S. Wang, V. Piuri, E.E., Jr. Swartzlander, "Granularly-pipelined CORDIC processors for sine and cosine generators", in *Proc. of the 1996 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP'96)*, Atlanta, GA, USA, pp. 3298-3301, May, 1996. ISBN: 0-7803-3192-3. [DOI: 10.1109/ICASSP.1996.550582 ]
- IC-240 L. Dadda, V. Piuri, F. Salice, "Leading zero detectors", in *Proc. of the 1996 IEEE Massively-Parallel Computing Systems (MPCS'96)*, Ischia, Italy, pp. 409-416, May, 1996
- IC-241 C. Alippi, V. Piuri, "Prediction and identification of non-linear dynamic systems in power plants (abstract)", in *Proc. of the 1996 Snowbird Workshop: Machines that Learn(abstracts)*, Snowbird, UT, USA, April, 1996
- IC-242 A. Pelagotti, V. Piuri, "Spectral analysis and synthesis of three-layered feed-forward neural networks for function approximation", in *Proc. of the 1996 IEEE International Conference on Microelectronics for Neural Networks (Microneuro96)*, Lausanne, Switzerland, pp. 239-245, February, 1996. ISBN: 0-8186-7373-7. [DOI: 10.1109/MNNFS.1996.493797 ]



- IC-243 A. Pelagotti, V. Piuri, "Entropic optimum synthesis of multi-layered feed-forward ANNs", in *Proc. of the 1995 IEEE International Conference on Neural Networks (ICNN'95)*, Perth, Australia, pp. 253-258, December, 1995. ISBN: 0-7803-2768-3. [DOI: 10.1109/ICNN.1995.488104]
- IC-244 L. Dadda, V. Piuri, "Bit-modular defect/fault-tolerant convolvers", in *Proc. of the 1995 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'95)*, Lafayette, LA, USA, pp. 90-98, November, 1995. ISBN: 0-8186-7107-6. [DOI: 10.1109/DFTVS.1995.476941]
- IC-245 Y.-M. Hsu, V. Piuri, E.E., Jr. Swartzlander, "Efficient time redundancy for error correcting inner-product units and convolvers", in *Proc. of the 1995 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'95)*, Lafayette, LA, USA, pp. 198-206, November, 1995. ISBN: 0-8186-7107-6. [DOI: 10.1109/DFTVS.1995.476953]
- IC-246 S. Demidenko, A. Ivanyukovich, L. Makhist, V. Piuri, "Error masking in compact testing based on the Hamming code and its modifications", in *Proc. of the 1995 IEEE Asian Test Symposium (ATS'95)*, Bangalore, India, pp. 303-307, November, 1995. ISBN: 0-8186-7129-7. [DOI: 10.1109/ATS.1995.485352]
- IC-247 S. Demidenko, A. Ivanyukovich, L. Makhinst, V. Piuri, "Validity of the compression technique based on the Hamming code and its modifications in digital circuit testing", in *Proc. of the 1995 International Symposium on IC Technology, Systems and Applications*, Singapore, pp. 520-524, September, 1995
- IC-248 C. Alippi, V. Piuri, "Identification of non-linear dynamic systems in power plants", in *Proc. of the 1995 IEEE Midwest Symposium on Circuits and Systems (MWSCAS'95)*, Rio de Janeiro, Brazil, pp. 493-496, August, 1995. ISBN: 0-7803-2972-4. [DOI: 10.1109/MWSCAS.1995.504484]
- IC-249 Y.-M. Hsu, E.E., Jr. Swartzlander, V. Piuri, "Recomputing by operand exchanging: a time-redundancy approach for fault-tolerant neural networks", in *Proc. of the 1995 IEEE International Conference on Application Specific Array Processors (ASAP'95)*, Strasbourg, France, pp. 54-64, July, 1995. ISBN: 0-8186-7109-2. [DOI: 10.1109/ASAP.1995.522905]
- IC-250 L. Breveglieri, L. Dadda, V. Piuri, "Column compression pipelined multipliers", in *Proc. of the 1995 IEEE International Conference on Application Specific Array Processors (ASAP'95)*, Strasbourg, France, pp. 93-103, July, 1995. ISBN: 0-8186-7109-2. [DOI: 10.1109/ASAP.1995.522909]
- IC-251 S. Demidenko, V. Piuri, "A generalized approach to digital circuit error localisation by using fault signature information", in *Proc. of the 1995 IEEE International Conference on Signal Processing, Circuits and Systems*, Singapore, pp. 246-251, July, 1995
- IC-252 C. Alippi, F. Fummi, M. Sami, V. Piuri, D. Sciuto, "Functional testing of Hopfield networks: an FSM-based approach", in *Proc. of the 1995 INNS World Congress on Neural Networks (WCNN'95)*, Washington, D.C., USA, pp. II.464-II.467, July, 1995
- IC-253 A. Pelagotti, V. Piuri, "Entropic analysis of multi-layered feed-forward neural networks", in *Proc. of the ISCA Golden West Conference on Intelligent Systems*, San Francisco, CA, USA, pp. 127-133, June, 1995
- IC-254 C. Alippi, V. Piuri, "Regression-type neural networks for system identification", in *Proc. of the 1995 IEEE Instrumentation and Measurement Technology Conference (IMTC'95)*, Boston, MD, USA, pp. 311-316, April, 1995. ISBN: 0-7803-2615-6. [DOI: 10.1109/IMTC.1995.515148]
- IC-255 Y.-M. Hsu, V. Piuri, E.E., Jr. Swartzlander, "Time-redundant multiple computation for fault-tolerant digital neural networks", in *Proc. of the 1995 IEEE International Symposium on Circuits and Systems (ISCAS'95)*, Seattle, WA, USA, pp. II.977-II.980, April, 1995. ISBN: 0-7803-2570-2. [DOI: 10.1109/ISCAS.1995.519929]
- IC-256 C. Alippi, R. Petracca, V. Piuri, "Off-line performance maximisation in feed-forward neural networks by applying virtual neurons and covariance transformations", in *Proc. of the 1995 IEEE International Symposium on Circuits and Systems (ISCAS'95)*, Seattle, WA, USA, pp. III.2197 -III.2200, April, 1995. ISBN: 0-7803-2570-2. [DOI: 10.1109/ISCAS.1995.523863]
- IC-257 Y.-M. Hsu, V. Piuri, E.E., Jr. Swartzlander, "Fault-tolerant neural architectures: the use of rotated operands", in *Proc. of the 1995 IEEE International Symposium on Circuits and Systems (ISCAS'95)*, Seattle, WA, USA, pp. III.2201-III.2204, April, 1995. ISBN: 0-7803-2570-2. [DOI: 10.1109/ISCAS.1995.523864]

- IC-258 Y.-M. Hsu, V. Piuri, E.E., Jr. Swartzlander, "Time redundancy for error detecting neural networks", in *Proc. of the 1995 IEEE International Conference on Wafer Scale Integration (WSI'95)*, San Francisco, CA, USA, pp. 111-121, January, 1995. ISBN: 0-7803-2467-6. [DOI: 10.1109/ICWSI.1995.515444]
- IC-259 L. Dadda, V. Piuri, "Fault-tolerant modular convolvers", in *Proc. of the 1994 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'94)*, Montreal, QC, Canada, pp. 37-45, October, 1994. ISBN: 0-8186-6307-3. [DOI: 10.1109/DFTVS.1994.630012]
- IC-260 L. Dadda, S. Inkinen, V. Piuri, "A processor for calorimetry at the Large Hadron Collider in the FERMI project", in *Proc. of the 1994 IEEE International Conference on Application-Specific Array Processors (ASAP'94)*, San Francisco, CA, USA, pp. 188-199, August, 1994. ISBN: 0-8186-6517-3. [DOI: 10.1109/ASAP.1994.331804]
- IC-261 L. Breveglieri, V. Piuri, "A fast pipelined FFT unit", in *Proc. of the 1994 IEEE International Conference on Application Specific Array Processors (ASAP'94)*, San Francisco, CA, USA, pp. 143-151, August, 1994. ISBN: 0-8186-6517-3. [DOI: 10.1109/ASAP.1994.331808]
- IC-262 C. Alippi, V. Piuri, "On the evaluation of neural paradigms", in *Proc. of the 1994 IEEE Midwest Symposium on Circuits and Systems (MWSCAS'94)*, San Francisco, CA, USA, pp. 557-561, August, 1994. ISBN: 0-7803-2428-5. [DOI: 10.1109/MWSCAS.1994.519300]
- IC-263 S. Bettola, V. Piuri, "High performance digital neural networks: the use of redundant binary representation for concurrent error detection", in *Proc. of the 1994 INNS World Conference on Neural Networks (WCNN'94)*, San Diego, CA, USA, pp. II.531-II.536, July, 1994
- IC-264 L. Breveglieri, V. Piuri, "Error detection in digital neural networks: an algorithm-based approach for inner product protection", in *Proc. of the 1994 SPIE International Symposium on Optics, Imaging and Instrumentation: advanced signal processing* (invited paper), San Diego, CA, USA, pp. 809-820, July, 1994
- IC-265 C. Alippi, F. Fummi, V. Piuri, M. Sami, D. Sciuto, "Behavioral testability and test pattern generation of the Hopfield network model", in *Proc. of the 1994 IEEE International Conference on Neural Networks (ICNN'94)*, Orlando, FL, USA, pp. 4571-4576, June, 1994. ISBN: 0-7803-1901-X. [DOI: 10.1109/ICNN.1994.375011]
- IC-266 L. Breveglieri, V. Piuri, "A modular fault-tolerant approach to design a front-end microsystem for calorimetry at LHC", in *Proc. of the 1994 IEEE Instrumentation and Measurement Technology Conference (IMTC'94)*, Hamamatsu, Japan, pp. 1136-1139, May, 1994. ISBN: 0-7803-1880-3. [DOI: 10.1109/IMTC.1994.351855]
- IC-267 C. Alippi, A. Pelagotti, V. Piuri, "The use of neural technologies for advanced seismographs", in *Proc. of the 1994 IEEE Instrumentation and Measurement Technology Conference (IMTC'94)*, Hamamatsu, Japan, pp. 153-156, May, 1994. ISBN: 0-7803-1880-3. [DOI: 10.1109/IMTC.1994.352110]
- IC-268 L. Breveglieri, V. Piuri, "Pipelined median filters", in *Proc. of the 1994 IEEE Instrumentation and Measurement Technology Conference (IMTC'94)*, Hamamatsu, Japan, pp. 1455-1458, May, 1994. ISBN: 0-7803-1880-3. [DOI: 10.1109/IMTC.1994.352171]
- IC-269 C. Alippi, V. Piuri, M. Sami, "The issue of error sensitivity in neural networks", in *Proc. of the 1994 IEEE International Conference on Massively Parallel Computing Systems (MPCS'94)*, Ischia, Italy, pp. 177-189, May, 1994. ISBN: 0-8186-6322-7. [DOI: 10.1109/MPCS.1994.367080]
- IC-270 D. D'Amore, V. Piuri, "Behavioral simulation of artificial neural networks: the case of unsupervised learning", in *Proc. of the 1994 IEEE-IMACS International Symposium on Signal Processing, Robotics and Neural Networks*, Lille, France, pp. 534-539, April, 1994
- IC-271 L. Breveglieri, V. Piuri, "Highly-modular architectures for digital median filtering", in *Proc. of the 1994 IEEE-IMACS International Symposium on Signal Processing, Robotics and Neural Networks*, Lille, France, pp. 480-485, April, 1994
- IC-272 C. Alippi, V. Piuri, M. Sami, "Sensitivity analysis in artificial neural networks", in *Proc. of the 1994 Snowbird Workshop: Neural Networks for Computing* (abstracts), Snowbird, UT, USA, April, 1994

- IC-273 A. Dell'Acqua, C. Alippi, G. Appelquist, S. Berglund, C. Bohm, L. Breveglieri, S. Brigati, L. Del Buono, P. Carlson, P. Cattaneo, L. Dadda, J. David, M. Engstrom, G. Fumagalli, U. Gatti, J.F. Genat, G. Goggi, M. Hansen, H. Hentzell, I. Hoglund, S. Inkinen, A. Kerek, H. Lebbolo, O. LeDortz, B. Lofstedt, F. Maloberti, P. Nayman, S.T. Persson, V. Piuri, F. Salice, M. Sami, A. Savoy-Navarro, R. Stefanelli, R. Sundblad, C. Svensson, G. Torelli, J.P. Vanuxem, N. Yamdagni, J. Yuan, R. Zitoun, "FERMI: a new generation of electronic modules for large data acquisition arrays required by high energy physics", in *Proc. of 1994 IEEE International Conference on Wafer Scale Integration (WSI'94)*, Invited paper, San Francisco, CA, USA, pp. 252-264, January, 1994. ISBN: 0-7803-1850-1. [DOI: 10.1109/ICWSI.1994.291246]
- IC-274 C. Alippi, V. Piuri, M. Sami, "Sensitivity to errors in artificial neural networks: a behavioral approach", in *Proc. of the 1994 IEEE International Symposium on Circuits and Systems (ISCAS'94)*, London, U.K., pp. 459-462, 1994. ISBN: 0-7803-1915-X. [DOI: 10.1109/ISCAS.1994.409625]
- IC-275 S. Demidenko, V. Piuri, A. Ivaniukovic, "Error localization in test outputs: a generalized analysis of signature compression", in *Proc. of the 1993 IEEE International Asian Test Symposium (ATS'93)*, Beijing, China, pp. 317-322, November, 1993 [DOI: 10.1109/ATS.1993.398824 ]
- IC-276 A. Dell'Acqua, M. Hansen, S. Ikinen, B. Lofstedt, J.P. Vanuxem, C. Svensson, J. Yuan, H. Hentzell, L. Del Buono, J. David, J.F. Genat, H. Lebbolo, O. LeDortz, P. Nayman, A. Savoy-Navarro, R. Zitoun, C. Alippi, L. Breveglieri, L. Dadda, V. Piuri, F. Salice, M. Sami, R. Stefanelli, P. Cattaneo, G. Fumagalli, G. Goggi, S. Brigati, U. Gatti, F. Maloberti, G. Torelli, P. Carlson, A. Kerek, G. Appelquist, S. Berglund, C. Bohm, M. Engstrom, N. Yamdagni, R. Sundblad, I. Hoglund, S.T. Persson, "System level policies for fault tolerance issues in the FERMI project", in *Proc. of the 1993 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'93)*, Venice, Italy, pp. 1-8, October, 1993. ISBN: 0-8186-3502-9. [DOI: 10.1109/DFTVS.1993.595597]
- IC-277 S. Demidenko, V. Piuri, M. Sami, R. Stefanelli, "Fault-tolerant neural architectures: a general approach to concurrent diagnosis based on signature analysis", in *Proc. of the 1993 IEEE-INNS International Joint Conference on Neural Networks (IJCNN '93-Nagoya)*, Nagoya, Japan, pp. 1917-1922, October, 1993. ISBN: 0-7803-1421-2. [DOI: 10.1109/IJCNN.1993.717030]
- IC-278 S. Demidenko, V. Piuri, M. Sami, R. Stefanelli, "Concurrent diagnosis in artificial neural networks: the use of signature analysis", in *Proc. of the AICA'93 Conference*, Gallipoli, Italy, pp. 208-218, September, 1993
- IC-279 S. Demidenko, W. Fornaciari, V. Piuri, R. Stefanelli, "Digital neural network architectures and problems related to testing and fault tolerance, Tutorial Lecture", in *Proc. of the 1993 IMACS International Conference on Mathematical Modelling and Scientific Computation* (Tutorial lecture), Sozopol, Bulgaria, pp. 15-36, September, 1993
- IC-280 V. Piuri, M. Villa, "The use of residue codes for concurrent error detection in artificial neural networks", in *Proc. of the 1993 INNS World Congress on Neural Networks (WCNN'93)*, Portland, OR, USA, pp. IV.825-IV.830, July, 1993
- IC-281 L. Dadda, V. Piuri, R. Stefanelli, "Multi-parallel convolvers", in *Proc. of the 1993 IEEE Symposium on Computer Arithmetic (ARITH-11)*, Windsor, ON, Canada, pp. 70-77, June, 1993. ISBN: 0-8186-3862-1. [DOI: 10.1109/ARITH.1993.378107 ]
- IC-282 V. Piuri, "Dynamic reallocation of processes and system dimensioning in fault-tolerant control systems", in *Proc. of the 1993 IEEE Instrumentation and Measurement Technology Conference (IMTC'93)*, Irvine, CA, USA, pp. 752-757, May, 1993. ISBN: 0-7803-1229-5. [DOI: 10.1109/IMTC.1993.382543 ]
- IC-283 C. Alippi, V. Piuri, "Optimised neural network design: energetic approaches", in *Proc. of the 1993 Snowbird Workshop: Neural Networks for Computing* (abstracts), Snowbird, UT, USA, April, 1993
- IC-284 L. Breveglieri, V. Piuri, D. Sciuto, "A fast pipelined complex multiplier: the fault tolerance issues", in *Proc. of 1992 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'92)*, Dallas, TX, USA, pp. 277-286, November, 1992. ISBN: 0-8186-2837-5. [DOI: 10.1109/DFTVS.1992.224347 ]
- IC-285 V. Piuri, M. Sami, R. Stefanelli, "Arithmetic codes for concurrent error detection in artificial neural networks: the case of AN+B codes", in *Proc. of the 1992 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'92)*, Dallas, TX, USA, pp. 127-136, November, 1992. ISBN: 0-8186-2837-5. [DOI: 10.1109/DFTVS.1992.224376]

- IC-286 C. Alippi, V. Piuri, "Topological minimisation of multi-layered feed-forward neural networks by spectral decomposition", in *Proc. of the 1992 IEEE-INNS International Joint Conference on Neural Networks (IJCNN'92)*, Beijing, China, pp. II.805-II.810, November, 1992
- IC-287 C. Alippi, G. Appelquist, S. Berglund, C. Bohm, L. Breveglieri, S. Brigati, P. Carlson, P. Cattaneo, L. Dadda, A. Dell'Acqua, C. Fuglesang, G. Fumagalli, U. Gatti, V.G. Goggi, M. Hansen, H. Hentzell, A. Kerek, B. Lofstedt, F. Maloberti, V. Piuri, F. Salice, M. Sami, R. Stefanelli, R. Sundblad, C. Svensson, G. Torelli, J.P. Vanuxem, N. Yamdagni, J. Yuan, "A digital front-end readout microsystem for calorimetry at LHC-the FERMI Project", in *Proc. of the 1992 IEEE Nuclear Science Symposium and Medical Imaging Conference*, Orlando, FL, USA, pp. 424-426 vol.1, October, 1992. ISBN: 0-7803-0884-0. [DOI: 10.1109/NSSMIC.1992.301281 ]
- IC-288 V. Piuri, "An Algorithmic Approach To Concurrent Error Detection In Artificial Neural Networks", in *Proc. of the 1992 IEEE Workshop on VLSI Signal Processing*, Napa, CA, USA, pp. 530 -539, October, 1992. ISBN: 0-7803-0811-5. [DOI: 10.1109/VLSISP.1992.641084 ]
- IC-289 V. Piuri, M. Sami, D. Sciuto, R. Stefanelli, "A behavioral approach to testability analysis for neural networks", in *Proc. of the EUROMICRO'92 Conference*, Paris, France, pp. 181-186, September, 1992
- IC-290 V. Piuri, M. Sami, D. Sciuto, R. Stefanelli, "A behavioral approach to testability of neural networks", in *Proc. of the 1992 IEEE-INNS International Joint Conference on Neural Networks (IJCNN'92)*, Baltimore, MD, USA, pp. II.654-II.659, June, 1992. ISBN: 0-7803-0559-0. [DOI: 10.1109/IJCNN.1992.226913]
- IC-291 A. Gandelli, V. Piuri, "A highly-parallel system for real-time electronic measurements", in *Microprocessing and Microprogramming* (Special Issue on the short notes presented at the EUROMICRO'91 conference, Wien, Austria, 1991), North-Holland, pp. 129-132, 1992. ISSN: 0165-6074. [DOI: 10.1016/0165-6074(92)90118-Q]
- IC-292 V. Piuri, R. Stefanelli, "Fault-tolerant techniques for VLSI tree structures", in *Microprocessing and Microprogramming* (Special Issue on the short notes presented at the EUROMICRO'91 conference, Wien, Austria, 1991), North-Holland, pp. 97-102, 1992. ISSN: 0165-6074.
- IC-293 V. Piuri, M. Sami, R. Stefanelli, "Neural networks on silicon: the mapping of hardware faults onto behavioral errors", in *Proc. of the 1991 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'91)*, Hidden Valley, PA, USA, pp. 103-115, November, 1991. ISBN: 0-8186-2457-4. [DOI: 10.1109/DFTVS.1991.199950 ]
- IC-294 V. Piuri, M. Sami, R. Stefanelli, "The influence of faults on operation of Hopfield networks", in *Proc. of the 1991 IEEE International Workshop on Microelectronics for Neural Networks (Microneuro'91)*, Munich, Germany, pp. 17-25, October, 1991 [DOI: 10.1016/0165-6074(92)90118-Q]
- IC-295 A. Gandelli, V. Piuri, "A flexible multiprocessor architecture for high-level computation in electronic measurements", in *Proc. of the 1991 IEEE-IMACS World Congress (IMACS'91)*, Dublin, Ireland, pp. 766-770, July, 1991
- IC-296 D. D'Amore, V. Piuri, "Behavioral simulation of artificial neural networks: A general approach for digital and analog implementation", in *Proc. of the 1991 IEEE International Symposium on Circuits and Systems (ISCAS'91)*, Singapore, pp. 1327-1330, June, 1991. ISBN: 0-7803-0050-5. [DOI: 10.1109/ISCAS.1991.176615]
- IC-297 A. Gandelli, V. Piuri, "A user-friendly measurement system: design and implementation of a flexible high-level interface for a parallel architecture", in *Proc. of the 1991 IEEE Instrumentation and Measurement Technology Conference (IMTC'91)*, Atlanta, GA, USA, pp. 483-488, May, 1991. ISBN: 0-87942-579-2. [DOI: 10.1109/IMTC.1991.161640]
- IC-298 V. Piuri, M. Sami, R. Stefanelli, "Fault tolerance in neural networks: theoretical analysis and simulation results", in *Proc. of the 1991 IEEE European Computer Conference (CompEuro'91)*, Bologna, Italy, pp. 429-436, May, 1991. ISBN: 0-8186-2141-9. [DOI: 10.1109/CMPEUR.1991.257423 ]
- IC-299 F. Distanti, V. Piuri, "ANNA - The use of PADS for artificial neural network analysis: the defect and fault tolerance issue", in *Proc. of the 1991 IEEE European Computer Conference (CompEuro'91)*, Bologna, Italy, pp. 537-540, May, 1991. ISBN: 0-8186-2141-9. [DOI: 10.1109/CMPEUR.1991.257443]

- IC-300 L. Breveglieri, V. Piuri, D. Sciuto, "Fast pipelined multipliers for bit-serial complex numbers", in *Proc. of the 1991 IEEE European Computer Conference (CompEuro'91)*, Bologna, Italy, pp. 821-825, May, 1991. ISBN: 0-8186-2141-9. [DOI: 10.1109/CMPEUR.1991.257496 ]
- IC-301 V. Piuri, "The use of the electrical simulator SPICE for behavioral simulation of artificial neural networks", in *Proc. of the 24th IEEE Annual Simulation Symposium*, New Orleans, LA, USA, pp. 18-29, April, 1991. ISBN: 0-8186-2169-9. [DOI: 10.1109/SIMSYM.1991.151481 ]
- IC-302 V. Piuri, R. Stefanelli, "Concurrent error detection in parallel multipliers and complex arithmetic structures: remarks on the use of the 3N code", in *Microprocessing and Microprogramming* (Special Issue on the short notes presented at the EUROMICRO'90 conference, Amsterdam, The Netherlands, 1990), North-Holland, pp. 47-52, 1991. ISSN: 0165-6074. [DOI: 10.1016/S0165-6074(08)80042-7]
- IC-303 V. Piuri, R. Stefanelli, "Efficient use of the 3N code for concurrent error detection in parallel multipliers", in *Computer arithmetic, scientific computation and mathematical modelling* (Selected papers of the IMACS SCAN'90 Conference, Albena, Bulgaria, Sept. 1990), E. Kaucher, S.M. Markov, G. Meyer (eds.), J.C. Baltzer AG Scientific Publishing, pp. 69-88, 1991
- IC-304 F. Distanto, V. Piuri, "ANNA - Artificial Neural Network Analyzer: the defect and fault-tolerance subsystems", in *Proc. of the 1990 IEEE International Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'90)*, Grenoble, France, pp. 279-288, November, 1990
- IC-305 F. Distanto, V. Piuri, A. Aliquo', N. Chiari, W. Fornaciari, P. Rastelli, "APES - Implementation of a CAD tool for array processor design: textual definition versus graphical description", in *Microprocessing and Microprogramming* (Special Issue on short notes presented at the EUROMICRO'89, Koln, Germany, 1989), North-Holland, pp. 63-67, September, 1990
- IC-306 V. Piuri, "Continuous learning: the use of a design methodology for fault-tolerant neural networks with unsupervised learning", in *Proc. of the EUSIPCO'90 Conference*, Barcellona, Spain, pp. 1606-1610, September, 1990
- IC-307 V. Piuri, "A comparative evaluation of the use of parity-based codes in fault tolerant arithmetic-logic array processors", in *Proc. of the IEEE-Eurasip Bilcon '90 - New Trends in Communication, Control and Signal Processing*, Ankara, Turkey, pp. 312-318, July, 1990
- IC-308 V. Piuri, "Continuous learning: a design methodology for fault-tolerant neural networks", in *Proc. of 1990 ACM-IEEE International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE'90)*, Charleston, SC, USA, pp. 1019-1029, July, 1990. ISBN: 0-89791-372-8. [DOI: 10.1145/98894.99116]
- IC-309 V. Piuri, "An Integrated hierarchical control system for fully-automated dyeings", in *Proc. of the 1990 IEEE International Conference on Applications of Industrial Electronics Systems*, Jerusalem, Israel, pp. 48-54, May, 1990 [DOI: 10.1109/AIES.1990.666333 ]
- IC-310 V. Piuri, E. Tourouta, "Global optimisation of fault-tolerant allocation of concurrent communicating processes in distributed environments", in *Microprocessing and Microprogramming* (Special Issue on short notes presented at the EUROMICRO'89, Koln, Germany, 1989), North-Holland, pp. 31-35, 1990. ISSN: 0165-6074.
- IC-311 V. Piuri, "Fault-tolerant WSI array processors: the use of Berger codes in parallel arithmetic-logic units", in *Proc. of the 1990 IEEE International Conference on Wafer Scale Integration (WSI'90)*, San Francisco, CA, USA, pp. 203-211, January, 1990. ISBN: 0-8186-9013-5. [DOI: 10.1109/ICWSI.1990.63902 ]
- IC-312 V. Piuri, "FAPES: an expert system for designing and optimising fault-tolerant arithmetic array processors", in *Proc. of the International Conference on CAD/CAM and AMT*, Jerusalem, Israel, pp. 1.1.2.1 - 1.1.2.7, December, 1989
- IC-313 V. Piuri, "On the Use of Berger Codes in Fault-Tolerant Bit-Serial Arithmetic-Logic Array Processors", in *Proc. of the 1989 IFIP Workshop on Parallel Architectures on Silicon*, Grenoble, France, pp. 328-337, December, 1989
- IC-314 F. Distanto, V. Piuri, "APES: an evaluation environment of fault-tolerance capabilities of array processors", in *Proc. of the 1989 IEEE Workshop on Defect and Fault Tolerance in VLSI Systems (DFT'89)*, Tampa, FL, USA, pp. 124-134, October, 1989

- IC-315 V. Piuri, "Optimum design of fault-tolerant arithmetic array processors by using data coding", in *Proc. of the EUROMICRO'89 Conference*, Koln, Germany, pp. 697-704, September, 1989
- IC-316 V. Piuri, "Use of  $A*N+B$  codes for fault-tolerant bit-serial array processors", in *Proc. of the Eighth Annual International Phoenix Conference on Computers and Communications (PCCC'89)*, Scottsdale, AZ, USA, pp. 9-13, March, 1989. ISBN: 0-8186-1918-x. [DOI: 10.1109/PCCC.1989.37351 ]
- IC-317 V. Piuri, R. Stefanelli, "Use of redundant binary representation for fault-tolerant arithmetic array processors", in *Proc. of the 1988 IEEE International Conference on Computer Design (ICCD '88)*, Port Chester, NY, USA, pp. 496-501, October, 1988. ISBN: 0-8186-0872-2. [DOI: 10.1109/ICCD.1988.25750 ]
- IC-318 F. Distantè, V. Piuri, "APES: an integrated system for behavioral design, simulation and evaluation of array processors", in *Proc. of the 1988 IEEE International Conference on Computer Design (ICCD '88)*, Port Chester, NY, USA, pp. 568-572, October, 1988. ISBN: 0-8186-0872-2. [DOI: 10.1109/ICCD.1988.25764 ]
- IC-319 V. Piuri, "Fault-tolerant hexagonal arithmetic array processors", in *Proc. of the EUROMICRO'88 Conference*, Zurich, Switzerland, pp. 629-636, August, 1988
- IC-320 V. Piuri, "Fault-tolerant array processors: an approach based upon  $A*N$  codes", in *Proc. of the IEEE International Symposium on Circuits and Systems (ISCAS'88)*, Helsinki, Finland, pp. 199 -203, June, 1988 [DOI: 10.1109/ISCAS.1988.14900]
- IC-321 F. Distantè, V. Piuri, "Distributed Architecture Design to Match Optimum Process Allocation: a Simulated Annealing Based Approach", in *Proc. of the 1987 IEEE Real-Time Systems Symposium (RTSS'87)*, San Jose, CA, USA, pp. 114-123, December, 1987. ISBN: 0818608153.
- IC-322 V. Piuri, E. Tourouta, "An approach to fault-tolerant allocation of concurrent communicating processes in multiprocessor architectures and hardware dimensioning", in *Proc. of the EUROMICRO'87 Conference*, Portsmouth, U.K., pp. 339-346, September, 1987
- IC-323 F. Distantè, R. Negrini, V. Piuri, "Simulated Annealing for defect-tolerance in two-dimensional arrays", in *Proc. of the 1987 IFIP International Workshop on Wafer Scale Integration (WSI'87)*, Uxbridge, U.K., pp. 103-114, September, 1987
- IC-324 V. Piuri, "Static evaluation of concurrency degree in multitask environments", in *Proc. of the 1987 IEEE International Conference on Computer and Applications (ICCA '87)*, Beijing, China, pp. 674-681, June, 1987
- IC-325 V. Piuri, "Fault-tolerant systolic arrays: an approach based upon residue arithmetic", in *Proc. of the 1987 IEEE International Conference on Computer Arithmetic (ARITH-8)*, Como, Italy, pp. 230-238, May, 1987 [DOI: 10.1109/ARITH.1987.6158712]
- IC-326 V. Piuri, D. Sciuto, "Testing of Bussed Cellular Arrays: A Case Study on PLA", in *Proc. of the 1987 IEEE Mediterrean Electrotechnical Conference (MELECON'87)*, Rome, Italy, pp. 409-413, March, 1987
- IC-327 V. Piuri, M. Berziera, A. Bisaschi, A. Fabi, "Residue arithmetic for a fault-tolerant multiplier: The choice of the best triple of bases", in *Microprocessing and Microprogramming* (Special Issue on short notes presented at the EUROMICRO'86, Venice, Italy, 1986), North-Holland, pp. 15-23, 1987. ISSN: 1383-7621. [DOI: 10.1016/0165-6074(87)90113-X]
- IC-328 V. Piuri, E. Tourouta, "Fault-tolerant allocation of concurrent communicating processes", in *Proc. 10th International Conference on Fault Tolerant Systems and Diagnostics (FTSD-10)*, Varna, Bulgaria, pp. 75-80, 1987
- IC-329 F. Distantè, V. Piuri, "Optimum Behavioral Test Procedure for VLSI Devices: a Simulated Annealing Approach", in *Proc. of the 1986 IEEE International Conference on Computer Design: VLSI in Computers (ICCD'86)*, Port Chester, NY, USA, pp. 31-35, October, 1986
- IC-330 F. Distantè, L. Galvani, A. Maderna, M. Minotti, V. Piuri, "BAT: optimization algorithms and overall design of a behavioral automatic tester", in *Proc. of the EUROMICRO'86 Conference*, Venice, Italy, pp. 363-370, September, 1986
- IC-331 V. Piuri, "An evaluation of computation partitioning into concurrent processes", in *Proc. of the EUROMICRO'85 Conference*, Elsevier, Copenhagen, Denmark, pp. 167-178, September, 1985. ISBN: 0444878351.

#### 9.4 Refereed papers in proceedings of national conferences

- NC-1 M. Lazzaroni, S. Ferrari, V. Piuri, A. Salman, L. Cristaldi, M. Faifer, S. Toscani, “Un Approccio Computazionale alla Modellizzazione dei Pannelli Solari”, in *Atti del XXXI Congresso Nazionale dell’Associazione Gruppo Misure Elettriche ed Elettroniche (GMEE 2014)*, Mantova, Italy, pp. 115-116, September, 2014. ISBN: 978-88-97683-66-7.
- NC-2 M. Gamassi, V. Piuri, D. Sana, O. Scotti, F. Scotti, “Sistemi Distribuiti Intelligenti per l’Identificazione, il Riconoscimento e il Monitoraggio Biometrici Mediante Tecniche Multi-Modali, Multi-Paradigma”, in *Proc. of the Congresso Ricerca e tecnologia per la sicurezza: la collaborazione tra Finmeccanica ed il sistema universitario*, Rome, Italy, November, 2005
- NC-3 M. Gamassi, V. Piuri, D. Sana, F. Scotti, “Robust Fingerprint Detection for Access Control”, in *Proc. of the Workshop RoboCare*, CNR, Rome, Italy, May, 2005
- NC-4 M. Gamassi, M. Lazzaroni, M. Misino, V. Piuri, D. Sana, F. Scotti, “Accuratezza e Prestazioni nei Sistemi Biometrici”, in *Proc. of the XXI Congresso Nazionale del Gruppo di Misure Elettriche ed Elettroniche (GMEE 2004)*, Crema, Italy, September, 2004
- NC-5 P. Gubian, A. Pace, V. Piuri, D. Sciuto, “Una Interfaccia Virtuale per Periferiche Grafiche: La Libreria MFB Generalizzata”, in *Proc. of the Aicographics ’85 Conference - Computer graphics and CAD*, ETAS, Milan, Italy, pp. 17.1-17.9, November, 1985
- NC-6 P. Gubian, L. Liotta, V. Piuri, D. Sciuto, F. Urero, “Catcif: Un Programma per la Visualizzazione di File CIF”, in *Proc. of the Aicographics ’84 Conference - Sistemi grafici, geometria della natura e CAD industriale*, Gruppo Editoriale Jackson, Milan, Italy, pp. 285-303, November, 1984

#### 9.5 Patents

- P-1 S. Cimato, M. Gamassi, V. Piuri, D. Sana, R. Sassi, F. Scotti, “Method for generating and verifying security information obtained by means of biometric readings”, European patent no. WO2007113888, October, 2007
- P-2 S. Cimato, M. Gamassi, V. Piuri, D. Sana, R. Sassi, F. Scotti, “Metodo di generazione e di verifica di una informazione di sicurezza ottenuta mediante letture biometriche”, Italian Patent no. MI2006A000641, March, 2006
- P-3 C. Alippi, G. D’Angelo, M. Matteucci, G. Pasquettaz, V. Piuri, F. Scotti, “A system and method for monitoring laser welds and giving an indication of the quality of welding”, European Patent no. EP1371443, April, 2003
- P-4 C. Alippi, G. D’Angelo, G. Invernizzi, G. Pasquettaz, V. Piuri, “System and method for monitoring laser welds, particularly in tailored blanks”, European Patent no. EP1361015, April, 2003
- P-5 C. Alippi, G. D’Angelo, M. Matteucci, G. Pasquettaz, V. Piuri, F. Scotti, “Sistema di monitoraggio per la qualità di saldature laser in tempo reale (Real-time laser welding monitoring system)”, Italian Patent No. TO2002A000508, 2002

#### 9.6 Text books and chapters in text books published by national publishers with scientific editorial board

- TB-1 V. Piuri, “La manutenzione dei sistemi di elaborazione”, in *Informatica di base per la medicina*, F. Pincirolì (ed.), UTET, pp. 363-376, 1992
- TB-2 D. D’Amore, V. Piuri, *Temi d’esame di elettrotecnica: anni accademici 1987-1989*, CLUP, 1989
- TB-3 V. Piuri, *Problemi di elettrotecnica*, CLUP, pp. 372, 1988 (2. ed. 1993 published by Città Studi). ISBN: 8-825-17072-6.
- TB-4 S. Palazzo, V. Piuri, M. Politi, *Temi d’esame di elettrotecnica: anni accademici 1984-1987*, CLUP, 1986

### 9.7 Refereed publications for scientific dissemination in international journals

- DI-1 V. Piuri, "Learning computers", in *Public Service Review: European Union*, April, 2008. ISSN: 1472-3395.
- DI-2 M. Gamassi, V. Piuri, D. Sana, F. Scotti, O. Scotti, "Scalable distributed biometric systems - Advanced techniques for security and safety", in *IEEE Instrumentation & Measurement Magazine*, pp. 21-28, April, 2006. ISSN: 1094-6969. [DOI: 10.1109/MIM.2006.1634984]
- DI-3 L. Cristaldi, A. Ferrero, V. Piuri, "Programmable instruments, virtual instruments, and distributed measurement systems: what is really useful, innovative and technically sound?", in *IEEE Instrumentation & Measurement Magazine*, pp. 20-27, September, 1999. ISSN: 1094-6969. [DOI: 10.1109/5289.783108]
- DI-4 C. Alippi, S. Ferrari, V. Piuri, M. Sami, F. Scotti, "New trends in intelligent systems design for embedded and measurement applications", in *IEEE Instrumentation & Measurement Magazine*, pp. 36-44, June, 1999. ISSN: 1094-6969. [DOI: 10.1109/5289.765968]
- DI-5 C. Alippi, A. Ferrero, V. Piuri, "Artificial intelligence for instruments and measurement applications", in *IEEE Instrumentation & Measurement Magazine*, pp. 9-17, June, 1998. ISSN: 1094-6969. [DOI: 10.1109/5289.685492]

### 9.8 Refereed publications for scientific dissemination in national journals

- DN-1 W. Fornaciari, V. Piuri, F. Salice, R. Stefanelli, "Paradigmi neurali e tecniche realizzative", in *Rivista dell'AEI*, AEI, pp. 55-62, September, 1994. ISSN: 1122-2824.
- DN-2 V. Piuri, "La rivoluzione del CAD/CAM : tecnologie e applicazioni ", in *Interfaccia*, ETAS, pp. 64-69, 1989. ISSN: 0393-4470.
- DN-3 V. Piuri, "Meccanismi di gestione dell'ingresso/uscita nell'ambiente fault-tolerant del micromainframe iAPX 432", in *Rivista di informatica*, Masson, pp. 5-32, 1985. ISSN: 0390-668X.
- DN-4 L. Liotta, V. Piuri, N. Scarabottolo, D. Sciuto, F. Urero, "Meccanismi di gestione della concorrenza nel micromaiframe iAPX 432", in *Rivista di informatica*, Masson, pp. 219-241, 1983. ISSN: 0390-668X.

### 9.9 Ph.D. dissertation

- D-1 V. Piuri, *Tecniche di tolleranza ai guasti per array di processori aritmetici*, Tesi di dottorato di Ricerca, Politecnico di Milano, pp. 304, 1989

### 9.10 Editor of books published by international publisher with scientific editorial board

- EB-1 V. Piuri, S. Raj, A. Genovese, R. Srivastava (eds.), *Trends in Deep Learning Methodologies - Algorithms, Applications, and Systems*, Elsevier, pp. 306, 2020. ISBN: 978-0-12-823268-2.
- EB-2 S. Ablameyko, L. Goras, M. Gori, V. Piuri (eds.), *Neural networks for instrumentation, measurement and related industrial applications*, IOS Press, pp. 340, 2003. ISBN: 1-586-03303-4.
- EB-3 S. Ablameyko, M. Gori, L. Goras, V. Piuri (eds.), *Limitations and future trends in neural computation*, IOS Press, pp. 254, 2003. ISBN: 1-586-03324-7.

### 9.11 Editorials for special issues in international journals with scientific editorial board

- SI-1 P. Bansal, V. Palade, V. Piuri, "Editorial: Foreword to the Special Issue on Artificial Intelligence for Hyper- and Multispectral Remote Sensing Image Processing", in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, pp. 7212-7215, 2024. ISSN: 1939-1404. [DOI: 10.1109/JS-TARS.2024.3379013]
- SI-2 M. Shojafar, M. Mukherjee, V. Piuri, J. Abawajy, "Guest Editorial: Security and Privacy of Federated Learning Solutions for Industrial IoT Applications", in *IEEE Transactions on Industrial Informatics*, pp. 3519-3521, May 2022. ISSN: 1551-3203. [DOI: 10.1109/TII.2021.3128972]
- SI-3 A. Mohammadi, P. Cheng, V. Piuri, K. N. Plataniotis, P. Campisi, "Guest Editorial - Distributed Signal Processing for Security and Privacy in Networked Cyber-Physical Systems", in *IEEE Transactions on Signal and Information Processing over Networks*, pp. 1-3, March, 2018. ISSN: 2373-7778. [DOI: 10.1109/TSIPN.2018.2801659]



- SI-4 M. Dong, V. Piuri, S.H.G. Chan, R. Jain, "Introduction to Special Issue on Multimedia Big Data: Networking", in *ACM Transactions on Multimedia Computing, Communications, and Applications*, pp. 70:1-70:3, December, 2016. ISSN: 1551-6857. [DOI: 10.1145/2989214]
- SI-5 J. You, V. Bhagavatula, V. Piuri, D. Zhang, "Guest Editorial: Multimedia-Based Healthcare", in *IEEE Transactions on Multimedia*, pp. 1925-1928, October, 2016. ISSN: 1520-9210. [DOI: 10.1109/TMM.2016.2606738]
- SI-6 H. Ning, D.G. Belanger, Y. Xia, V. Piuri, A.Y. Zomaya, "Guest Editorial Special Issue on Big Data Analytics and Management in Internet of Things", in *IEEE Internet of Things Journal*, pp. 265-267, August, 2015. ISSN: 2327-4662. [DOI: 10.1109/JIOT.2015.2459291]
- SI-7 M. Nappi, V. Piuri, T. Tan, D. Zhang, "Introduction to the Special Section on Biometric Systems and Applications", in *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, pp. 1457-1460, 2014. ISSN: 2168-2216. [DOI: 10.1109/TSMC.2014.2337851]
- SI-8 V. Piuri, J. Tian, E. Micheli-Tzanakou, "Guest Editorial - Special Section on Biometric Systems", in *IEEE Systems Journal*, pp. 387-388, December, 2009. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2009.2038953 ]
- SI-9 S. Ferrari, V. Piuri, "Guest Editorial - Special Section on VECIMS 2005 topics", in *IEEE Transactions on Instrumentation and Measurement*, pp. 1818-1819, September, 2008. ISSN: 0018-9456. [DOI: 10.1109/TIM.2008.919864 ]
- SI-10 M. Siegel, V. Piuri, "Guest Editorial - Special Issue on the IEEE International Workshop on Virtual and Intelligent Measurement Systems (VIMS2000)", in *IEEE Instrumentation & Measurement Magazine*, December, 2000. ISSN: 1094-6969.
- SI-11 C. Alippi, V. Piuri, "Guest Editorial - Special Issue on Neural Technologies for Industrial Application", in *Integrated Computer-Aided Engineering*, IOS Press, 1999. ISSN: 1069-2509.
- SI-12 C. Alippi, V. Piuri, "Guest Editorial - Special Issue on Neural Technologies for Identification, Control, Robotics, and Signal/Image Processing", in *International Journal of Systems Architecture*, North-Holland, April, 1998. ISSN: 1383-7621. [DOI: 10.1016/S1383-7621(97)00063-5]
- SI-13 G. Allan, V. Piuri, M. Rivier, C. Thibeault, T. Ziaja, "Guest Editorial - Special Issue on Defect and Fault Tolerance in VLSI Systems", in *International Journal of Microelectronic Systems Integration*, Plenum Press, December, 1997
- SI-14 C. Alippi, V. Piuri, "Guest Editorial - Special Issue on Neural Technologies for Identification, Control, Robotics, and Signal/Image Processing", in *International Journal of Microelectronic Systems Integration*, Plenum Press, March, 1997

## 9.12 Editorials in international journals with scientific editorial board

- E-1 V. Piuri, "Editorial", in *IEEE Systems Journal*, pp. 872-872, September, 2016. ISSN: 1937-9234. [DOI:10.1109/JSYST.2016.2593591]
- E-2 V. Piuri, "Editorial", in *IEEE Systems Journal*, pp. 3-3, March, 2016. ISSN: 1937-9234. [DOI: 10.1109/JSYST.2016.2517758]
- E-3 V. Piuri, "Editorial", in *IEEE Systems Journal*, pp. 325-325, June, 2015. ISSN: 1937-9234. [DOI: 10.1109/JSYST.2015.2427457]
- E-4 V. Piuri, "Editorial", in *IEEE Systems Journal*, pp. 1019-1020, December, 2014. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2014.2363398]
- E-5 V. Piuri, "Editorial", in *IEEE Systems Journal*, pp. 679-680, September, 2014. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2014.2338635]
- E-6 V. Piuri, "Editorial", in *IEEE Systems Journal*, pp. 335, June, 2014. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2014.2312473]
- E-7 V. Piuri, "Editorial", in *IEEE Systems Journal*, pp. 3, March, 2014. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2013.2280232]

- E-8 H. Ning, J. Ma, L.T. Yang, W. Lü, X. Wu, V.C.M. Leung, V. Piuri, “Editor’s note”, in *Science China Information Sciences*, pp. 1-1, February 1, 2014. ISSN: 1869-1919. [DOI: 10.1007/s11432-014-5072-1]
- E-9 V. Piuri, “Editorial”, in *IEEE Systems Journal*, pp. 519, December, 2013. ISSN: 1932-8184. [DOI: 10.1109/JSYST.2013.2279329]
- E-10 V. Piuri, A.G. Aghdam, S. Nahavandi, “Editorial”, in *IEEE Systems Journal*, pp. 2-3, March, 2013. ISSN: 1932-8184. [DOI: 10.1109/EESMS.2013.6661694]
- E-11 V. Piuri, “2009 IEEE Symposium Series on Computational Intelligence (SSCI 2009) - Conference Report”, in *IEEE Computational Intelligence Magazine*, pp. 20-21, November, 2009. ISSN: 1556-603X. [DOI: 10.1109/MCI.2009.934632 ]
- E-12 V. Piuri, “In Memoriam - Dr. Lawrence J. Fogel”, in *IEEE Computational Intelligence Magazine*, pp. 68-69, February, 2008. ISSN: 1556-603X. [DOI: 10.1109/MCI.2007.913359 ]
- E-13 V. Piuri, “President’s Message - A Look to Our Past with Our Future in Mind”, in *IEEE Computational Intelligence Magazine*, pp. 2-4, November, 2007. ISSN: 1556-603X. [DOI: 10.1109/MCI.2007.910200]
- E-14 V. Piuri, “President’s Message - Growing Together”, in *IEEE Computational Intelligence Magazine*, pp. 3-9, August, 2007. ISSN: 1556-603X. [DOI: 10.1109/MCI.2007.385356 ]
- E-15 V. Piuri, “President’s Message - Serving your needs...”, in *IEEE Computational Intelligence Magazine*, pp. 3-4, May, 2007. ISSN: 1556-603X. [DOI: 10.1109/MCI.2007.353414 ]
- E-16 V. Piuri, “President’s Message - Educational Activities”, in *IEEE Computational Intelligence Magazine*, pp. 3-4, February, 2007. ISSN: 1556-603X. [DOI: 10.1109/MCI.2007.357172 ]
- E-17 V. Piuri, “President’s Message - IEEE/CIS Publications Activities”, in *IEEE Computational Intelligence Magazine*, pp. 3-4, November, 2006. ISSN: 1556-603X. [DOI: 10.1109/MCI.2006.329684 ]
- E-18 V. Piuri, “President’s Message - CIS: Conference activities”, in *IEEE Computational Intelligence Magazine*, pp. 2-3, August, 2006 [DOI: 10.1109/MCI.2006.1672980 ]
- E-19 V. Piuri, “President’s Message - CIS: technically speaking”, in *IEEE Computational Intelligence Magazine*, pp. 3-4, May, 2006. ISSN: 1556-603X. [DOI: 10.1109/MCI.2006.1626488]
- E-20 V. Piuri, “Welcome to IEEE Computational Intelligence Magazine!”, in *IEEE Computational Intelligence Magazine*, pp. 3, February, 2006. ISSN: 1556-603X. [DOI: 10.1109/MCI.2006.1597054]
- E-21 V. Piuri, “A vision for our future based on our roots”, in *IEEE Connections*, pp. 1-2, August, 2005

### 9.13 Tutorials

- T-1 V. Piuri, F. Scotti, “Implementations of computational intelligence techniques”, in *IEEE Expert Now*, IEEE, 2007. ISBN: 0780396715.
- T-2 V. Piuri, “Composite technologies for intelligent industrial laser processing”, in *Proc. of the 2002 ISA/IEEE Sensors for Industry Conference (SICon 2002)*, Houston, TX, USA, pp. 270 - 282, November, 2002. ISBN: 1-55617-834-4. [DOI: 10.1109/SFICON.2002.1159839]