
PAOLO CARBONE

CURRICULUM VITAE

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Paolo Carbone
Research profiles

[ResearcherID](#)
[ORCID](#)
[Google Scholar](#)
[ResearchGate](#)

Education

University of Padova - Italy — PhD in Instrumentation and Measurement, 1994
University of Padova - Italy — Laurea, 1990
University of California, Los Angeles - Classes in Electronic Engineering, one-year exchange program, UC-funded scholarship (Alumnus of UCEAP – University of California Education Abroad Program), 1989

Academic appointments

- Full Professor in Electronic Instrumentation at the University of Perugia, Italy, (2003 - to date)
- Associate Professor in Electronic Instrumentation at the University of Perugia, Italy, (2000-2003)
- Researcher at the University of Perugia, Italy, (1997-2000)
- Researcher at the University of Roma III, Italy, (1994-1997)

Academic duties

- Member of the External Assessment board of the University of Genova (2013-2017)
 - Member of the External Assessment board of the University of Bolzano (2013-to date)
 - Member of the External Assessment board of the University of Cassino (2013-to date)
 - Head of the Dept. of Electrical Engineering of the University of Perugia (2011-2103)
 - Coordinator of the Quality Board of the University of Perugia (2013-to date). In his capacity he coordinated the activities bringing the entire University to be qualified for the quality accreditation system managed by the National Agency for the Evaluation of the University and Research Systems (ANVUR in 2014)
 - Quality representative for the application of the ISO 9001 Quality Management Systems to the University of Perugia (2003 - to date)
 - Director in Italy of the Bradford-Perugia MBA in Italy (2011, Master in Business Administration)
 - Coordinator of the research area "Methods and Measurement for Quality" within the National Association of University Measurement Professors (GMEE) (2009–11)
 - Team-leader for the application of the Common Assessment Framework at the University of Perugia (2011)
 - President of the Association TUCEP (2008–11, www.tucep.org). In this role he coordinated the activity of 5 people working with Universities, companies and actors of the regional government, to propose and manage educational and research projects, funded by regional, national and European funds (1 Meuro turnover).
 - Member of PhD committees at the Instituto Superior Tecnico (Lisbon, Portugal, ref. Prof. A.C. Serra) and Royal Institute of Technology (Stockholm, Sweden, ref. Prof. P. Handel)
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- Eligible member candidate for the National Habilitation Committee (2012) <http://abilitazione.miur.it/public/commissariEleggibili.php>.

IEEE Services and recognitions

- IEEE Fellow member since 2015 (IEEE member for the last 27 years)
- President of the IEEE Systems Council (2016-17)
- Recipient of the Instrumentation and Measurement Technical Award (2015): For outstanding contributions to the advancement of the state-of-the-art in the quantization of signals in digital instrumentation
- Distinguished Lecturer for the IEEE Systems Council (since 2012)
- Associate Editor with the IEEE Transactions on Circuits and Systems-II (2000 - 2002)
- Associate Editor with the IEEE Transactions on Circuits and Systems-I (2005 - 2007)
- Regular reviewer for *IEEE Transactions on Instrumentation and Measurement* and for several other IEEE journals and congresses
- Representative member of the IEEE Instr. and Meas. Society within the IEEE Systems Council (2009-2011)
- Chair of the Italian Chapter of the IEEE Systems Council (2009-2011).
- VicePresident for publications in the IEEE Systems Council and Adcom member (2011-14)
- Member of the Steering Committee of IEEE Transactions on Cloud Computing (2013-2016)
- Member of the Steering Committee of IEEE Transactions on Big Data (2013-2016)

Other editorial activities

- Editor-in-Chief of the Elsevier journal Measurement (starting January 2018)
- Editor-in-Chief of the open-access scientific journal ACTA Imeko (acta.imeko.org), (2013 - 2017)
- Associate Editor with the Elsevier journal Computer Standards and Interfaces (2005 -2008)
- Guest Editor of two special issues/sections in IEEE journals:
 - Special Issue on Complex Measurement Systems - *IEEE Systems Journal* vol. 8, no. 4, 2014
 - Special Section on IMEKO 2011 International Workshop on ADC Modeling, testing and Data Converter Analysis and Design and the IEEE 2011 ADC Forum, *IEEE Transactions on Instrumentation and Measurement*, vol. 61, issue 11, 2012.

Bibliometric data

- Google Scholar h-index: 24 (extraction date: Nov. 2017)
- Scopus h-index: 19 (extraction date: Nov. 2017)
- 4-th most productive author in terms of record count in the international journal *IEEE Transactions on Instrumentation and Measurement* (source Scopus, extraction date: Sept. 2017)

Research activity

Application of statistical signal processing to real-world problems. Topics include:

- data conversion (ADC, DAC, TDC)
- synchronization and positioning in sensor networks
- application of statistical signal processing for the improvement of electronic instrumentation performance and reliability
- power quality measurements

Within his research group, he routinely coordinates the education of PhD students.

Publications

- see attached publication list
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- Co-editor of the book: *Design, Modelling and Testing of Data Converters*, Publisher: Springer (other co-editors Sayfe Kiaei (Arizona State University) and Fang Xu (Polytope Solutions)), 2014. ISBN 978-3-642-39655-7. **Chapter downloads** as of June 2015, **12812** (source: Springer book performance report)
 - Co-editor of the book: *Corporate Sustainability*, Publisher: Springer Editor for Business & Economics (other co-editors Paolo Taticchi, Vito Albino), 2013. ISBN 978-3-642-37017-5. **Chapter downloads** as of June 2015, **15841** (source: Springer book performance report)
 - Co-editor of the book: *Fundamentals of modern measurements: theory and practice*, Publisher: IEEE-Wiley (other co-editors Alessandro Ferrero, Dario Petri, Marcantonio Catelani), 2015.

Complete list of publications available at the URL:

<http://www.unipg.it/pagina-personale?n=paolo.carbone>

In the latest research quality assessment made by the National Agency for the Evaluation of the University and Research System, his 6 evaluated research products published in the period 2011-2014, were graded as follows: 5 'excellent' (points 1.0) and 1 'good' (points 0.8) on a 0-1 scale.

Visiting positions

- visiting research and teaching position: *University of California – Irvine* (instructor for the modules *Digital Signal Processing Laboratory* and *Telecommunications* - 1996).
- visiting research position: *Vrije Universiteit Brussels*, Department of Fundamental Electricity and Instrumentation, (November–December 2012 and December 2014)
- Associated Lecturer, *Bradford University*, UK (2011)
- Contract professor, *Imperial College*, UK (2017) Decision Analytics, WBMA program

Coordination of scientific activities

He coordinates the scientific research group in *Electronic measurements* at the University of Perugia (2003-to date). See URL: [Laboratorio misure](#)

He was chairmen / co-chairmen of the following congresses:

- Co-Chairman and co-founder of the 1st IEEE International Symposium of Systems Engineering, Rome, 28–29 September 2015 and following editions
- General Co-Chair and co-founder of the 2013 IEEE Nordic Mediterranean Workshop on Time-to-Digital Converters, Perugia, Oct. 2013
- Honorary Chairman of the IEEE International Workshop on Environmental, Energy and Monitoring Systems, Perugia, Italy, September 2012
- Chairman of 16th IMEKO TC-4 International Workshop on ADC Modelling and Testing and IEEE ADC Forum, Orvieto, June 2011
- Chairman of the IEEE International Workshop on Environmental, Energy and Monitoring Systems, Milano, Italy, September 2011
- Chairman of the IEEE International Workshop on Environmental, Energy and Monitoring Systems, Taranto, Italy, September 2010
- Chairman of 8th IMEKO TC-4 International Workshop on ADC Modelling and Testing, Perugia, September 2003

Doctorate and summer schools

- Co-director of the '2nd International Summer School on Sustainable Strategies and Operations,' Columbia University, July 31 - August 7 2010 New York, USA
 - Member of the Board of Directors of the 'International Summer School on Measuring and Managing Corporate Sustainability,' NYU Poly, July 23 - July 30 2011, New York, USA (www.iss2011.com)
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- Co-founder of the Taiwan-Italy Program at the University of Perugia (company-based internships for Taiwanese students - Thunghai University - and engineering management-based educational program, started 2010 and ongoing)
 - Co-director of the National Doctorate School in Instrumentation and Measurement 'I. Gorini' (2009-2011).
 - Member of several technical Committees of Scientific Congresses (mostly IEEE)

Recent projects

- 2011 ISA 50.000 euro (co-responsibility) – Improvement of production processes
- 2008–2011: coordinator of the national project 'Methodologies and measurement techniques for the spacial-temporal localization in wireless sensor-networks' (Italian Ministry of University and Research, 101.224 euro - 4 Italian Universities involved: Perugia, Padova, Trento, Brescia).
- 2012–2013: coordinator of the project 'Module mismatch optimization in photovoltaic systems,' 27.000 euro.
- 2012–in progress: coordinator of the project 'FMEA of vertical transportation equipment', 24.000 euro.
- 2012 – coordinator of the project 'Advanced Business Intelligence based on Sustainability' (Progetto SustainABlility), 49.300 euro
- 2013 – 2014 co-responsibility for the project 'Feasibility study of a positioning system for industrial applications,' 15.000 euro
- 2015-to date: national coordinator of the project: Six DOF scalable finger tracking system, total of 425.087 euro among 4 research groups.

Professional activities

Paolo Carbone has thought enterprise level short-courses on quality management in small enterprises. He is a qualified auditor for the international standards ISO 9001:2008 and ISO 14001:2004. He is a registered auditor with the Italian Conference of Chancellors (CRUI), that manages a quality management system model that is applied at University level. As lead auditor, he has conducted more than 20 audits at various Italian Universities. For the same organization he was a consultant on the topic 'Research Assessment.' He is a registered system-level auditor with the National Agency for the Evaluation of the University and Research Systems (ANVUR – since 2015).

Teaching activity

He teaches and has thought the following classes:

- Electronic Measurements (2012-to date)
- Probability theory (2008-to date)
- Reliability and Quality Engineering (1999-2003)
- Quality Engineering (2003-2010)
- Software quality (2003-2008)
- Data Acquisition Systems (2002-2009)
- Statistical Signal Processing (2004-2008)
- Signal Quantization (Phd program 2012-2013)

References

- Prof. Johan Schoukens, Vrije Universiteit Brussels, johan.Schoukens@vub.ac.be
 - Prof. Peter Händel, Royal Institute of Technology, Stockholm Sweden, peter.handel@ee.kth.se
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