

## Alessandro Depari's Curriculum Vitae

**Alessandro Depari** received the M.Sc. Degree in *Electronics Engineering* and the Ph.D. Degree in *Electronic Instrumentation* from the University of Brescia, Brescia, Italy, in 2002 and 2006, respectively. Since 2007, he has been Assistant Professor and, since 2017, Associate Professor with the Department of Information Engineering, University of Brescia, in the field of electrical and electronic measurements. He is member of the research group Embedded Systems and Smart Sensors (ES<sup>3</sup>) at the University of Brescia.



From 2004 to 2009, he was appointed as assistant of the *Fundamentals of Digital Electronics* course for the B.Sc. Degree in *Information Engineering*.

Since the academic year 2010/11, he has been appointed as teacher of the *Logic Networks and Principles of Digital Electronics* module and, since the academic year 2015/16, of the *Complements of Digital Electronics and Microprocessors* module, within the *Digital Electronics* integrated course, for the B.Sc. Degree in *Electronics and Communication Engineering*.

Since 2004, he has been cooperating or has cooperated with teaching in the following courses/modules:

- *Electronic Systems for the Automation and PLC*, for the B.Sc. Degree in *Information Engineering*
- *Distributed Systems and PLC*, for the B.Sc. Degree in *Electronics and Communication Engineering, Information Engineering and Industrial Automation Engineering*
- *Systems for Industry and PLC*, for the B.Sc. Degree in *Electronics and Communication Engineering and Information Engineering*
- *Fundamentals of Digital Electronics and Fundamentals of Electronics*, for the B.Sc. Degree in *Information Engineering*
- *Design of Digital Electronic Systems*, for the M.Sc. Degree in *Electronics Engineering for Automation*
- *Instrumentation Laboratory for Automation*, for the M.Sc. Degree in *Industrial Automation Engineering*
- *Instrumentation for Industrial Automation*, for the M.Sc. Degree in *Electronics Engineering*

Since 2011, he has been member of the Committee of the Ph.D. Programs in *Electronic Engineering, Sensors and Instrumentation* and in *Information Engineering*, at the University of Brescia.

Since 2003, he was supervisor of more than 30 thesis works and tutor of one Ph.D. candidate.

His research activity includes: sensor signal conditioning and processing; embedded systems based on microcontrollers, DSPs and FPGAs; development of smart sensors and sensor networks for distributed measurement with industrial communication systems; design of methods and digital electronic circuits for numeric measurement instrumentation; design and development of systems for m-Health (mobile health) and IoT (Internet of Things) applications.

Since 2004, he has been cooperating with *PROFIBUS and PROFINET Competence Center*, the only one in Italy, located at the Engineering campus of University of Brescia, accredited by the PROFIBUS International association.

In July 2011, he has been Visiting Fellow in the School of Engineering Systems, Faculty of Built Environment and Engineering, Queensland University of Technology, Brisbane, Australia.

He worked and he is currently involved in numerous scientific research projects of local and national interest.

He is author or co-author of more than 100 scientific works, published on international journals, books and conference proceedings. He is co-inventor of two international patents.

He has been member of the Italian Associations SIE (Italian Society of Electronics - formerly Group of Electronics, GE) and of the GMEE (Group of Electrical and Electronic Measurements) since 2003.

He has been member of IEEE since 2007, of the IEEE Instrumentation and Measurement Society since 2012, and of the IEEE Industrial Electronics Society since 2018.

He has been Secretary of the IEEE Italy Chapter IM - Instrumentation and Measurement since 2015.

He has been Counselor of the IEEE Student Branch of Brescia since 2016.

Since 2005, he has been serving as reviewer for several international journals, including: *Transactions on Instrumentation and Measurements* (IEEE), *Sensors Journal* (IEEE), *Sensors and Actuators A: Physical* (Elsevier), *Measurements Science and Technology* (IOP), *International Journal of Industrial Electronics and Drives* (Inderscience), *International Journal of Instrumentation Technology* (Inderscience), *Journal of Circuits, Systems, and Computers* (World Scientific), *Sensors* (MDPI).

He served as Section Editor of the *IEEE International Workshop on Metrology for Industry 4.0 and IoT 2018* Special Issue of the *ACTA IMEKO* journal.

He serves as Guest Editor of the *IEEE Sensors Applications Symposium 2020* Special Issue of the *IEEE Transactions on Instrumentation and Measurements* journal.

He has been member of the Technical Program Committee of the *IEEE International Instrumentation and Measurement Technology Conference (I2MTC)* since 2012.

He has been member of the Technical Program Committee of the *IEEE Sensors Applications Symposium (SAS)* since 2013.

He has been member of the Steering Committee of the *IEEE Sensors Applications Symposium (SAS)* since 2016.

He has been Chair-Elect of the Steering Committee of the *IEEE Sensors Applications Symposium (SAS)* since 2019.

He served as Special Session Chair of the *IEEE Sensors Applications Symposium (SAS)*, Seoul, Republic of Korea, March 12-14, 2018.

He served as Technical Program Co-Chair of the *IEEE International Workshop on Metrology for Industry 4.0 and IoT*, Brescia, Italy, April 16-18, 2018.

He served as Technical Program Co-Chair of the *IEEE Sensors Applications Symposium (SAS)*, Sophia Antipolis, France, March 11-13, 2019.

He served as Technical Program Co-Chair of the *IEEE Sensors Applications Symposium (SAS)*, Kuala Lumpur, Malaysia, March 9-11, 2020.

He serves as Technical Program Co-Chair of the *IEEE Sensors Applications Symposium (SAS)*, Sundsvall, Sweden, August 2-4, 2021.

## Recent publications on international journals

- M. Rizzi, A. Depari, P. Ferrari, A. Flammini, S. Rinaldi, E. Sisinni, “Synchronization Uncertainty Versus Power Efficiency in LoRaWAN Networks”, *IEEE Trans. Instrumentation and Measurement*, April, 2019, Vol. 68, N. 4, pp. 1101-1111, ISSN 0018-9456, [DOI 10.1109/TIM.2018.2859639](https://doi.org/10.1109/TIM.2018.2859639).
- A. Depari, D. Fernandes Carvalho, P. Bellagente, P. Ferrari, E. Sisinni, A. Flammini, A. Padovani, “An IoT Based Architecture for Enhancing the Effectiveness of Prototype Medical Instruments Applied to Neurodegenerative Disease Diagnosis”, *Sensors*, April, 2019, Vol. 19, N. 7, pp. 1564, ISSN 1424-8220, [DOI 10.3390/s19071564](https://doi.org/10.3390/s19071564).
- D. Fernandes Carvalho, P. Ferrari, E. Sisinni, A. Depari, S. Rinaldi, M. Pasetti, D. Silva, “A test methodology for evaluating architectural delays of LoRaWAN implementations”, *Pervasive and Mobile Computing*, May, 2019, Vol. 56, pp. 1-17, ISSN 1574-1192, [DOI 10.1016/j.pmcj.2019.03.002](https://doi.org/10.1016/j.pmcj.2019.03.002).
- A. Galli, G. Frigo, D. Chindamo, A. Depari, M. Gadola, G. Giorgi, “Denoising ECG Signal by CSTFM Algorithm: Monitoring During Motorbike and Car Races”, *IEEE Trans. Instrumentation and Measurement*, July, 2019, Vol. 68, N. 7, pp. 2433-2441, ISSN 0018-9456, [DOI 10.1109/TIM.2019.2906989](https://doi.org/10.1109/TIM.2019.2906989).
- C. Crema, A. Depari, A. Flammini, E. Sisinni, T. Haslwanter, S. Salzmann, “Characterization of a wearable system for automatic supervision of fitness exercises”, *Measurement*, December, 2019, Vol. 147, pp. 106810, ISSN 0263-2241, [DOI 10.1016/j.measurement.2019.07.038](https://doi.org/10.1016/j.measurement.2019.07.038).
- P. Bellagente, C. Crema, A. Depari, A. Flammini, G. Lenzi, S. Rinaldi, “Framework-Oriented Approach to Ease the Development of Ambient Assisted-Living Systems”, *IEEE Systems Journal*, December, 2019, Vol. 13, N. 4, pp. 4421-4432, ISSN 1932-8184, [DOI 10.1109/JSYST.2019.2924150](https://doi.org/10.1109/JSYST.2019.2924150).
- M. Pasetti, E. Sisinni, P. Ferrari, S. Rinaldi, A. Depari, P. Bellagente, D. Della Giustina, A. Flammini, “Evaluation of the Use of Class B LoRaWAN for the Coordination of Distributed Interface Protection Systems in Smart Grids”, *Journal of Sensor and Actuator Networks*, March, 2020, Vol. 1, N. 9, pp. 13, ISSN 2224-2708, [DOI 10.3390/jsan9010013](https://doi.org/10.3390/jsan9010013).
- E. Sisinni, P. Ferrari, D. Fernandes Carvalho, S. Rinaldi, M. Pasetti, A. Flammini, A. Depari, “LoRaWAN Range Extender for Industrial IoT”, *IEEE Trans. Industrial Informatics*, August, 2020, Vol. 16, N. 9, pp. 5607-5616, ISSN 1551-3203, [DOI 10.1109/TII.2019.2958620](https://doi.org/10.1109/TII.2019.2958620).
- E. Sisinni, A. Depari, A. Flammini, G. Ferri, V. Stornelli, G. Barile, “Full-analog parasitic capacitance compensation for AC-excited differential sensors”, *IEEE Trans. Instrumentation and Measurement*, August, 2020, Vol. 69, N. 8, pp.5890-5899, ISSN 0018-9456, [DOI 10.1109/TIM.2019.2962296](https://doi.org/10.1109/TIM.2019.2962296).
- P. Ferrari, E. Sisinni, A. Depari, A. Flammini, S. Rinaldi, P. Bellagente, M. Pasetti, “On the Performance of Cloud Services and Databases for Industrial IoT Scalable Applications”, *Electronics*, September, 2020, Vol. 9, N. 9, p. 1435, ISSN 2079-9292, [DOI 10.3390/electronics9091435](https://doi.org/10.3390/electronics9091435).

The complete list of international publications and patents can be found in the [IRIS-OPENBS](#) archive.