#### PERSONAL INFORMATION





DITEN, University of Genoa, Via Opera Pia 11a

+39 00103532775 🗎 +393483053884

maurizio.valle@unige.it

https://rubrica.unige.it/personale/VUZDW15s

ORCID: http://orcid.org/0000-0002-7366-6060

Sex: Male | Date of birth: 01/08/1959 | Nationality: Italian

Enterprise	University	EPR
☐ Management Level		☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate Professor	Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

#### **WORK EXPERIENCE**

From 01/12/2019 - to present

# Full Professor - SSD ING-INF/01 Electronics

Dept. of Electrical, Electronic and Telecommunication Engineering and Naval Architecture, DITEN, University of Genoa, Genova, Italy

- Research topics: tactile sensors and systems, electronic skin, embedded electronic systems for robotics, prosthetics, and IoT, Haptic Human Machine Interfaces
- Teaching: "Digital Systems", MSc in Electronics Engineering, "Electronics" BSc in Electronic Engineering and Information technologies
- Institutional duties: Coordinator of the Teaching Board of the PhD in Science and Technology for Electronic and Telecommunication Engineering ( <a href="https://stiet.phd.unige.it/">https://stiet.phd.unige.it/</a>)
- Institutionald duties: head of the Connected Objects, Smart Materials, Integrated Circuits (COSMIC)
   Laboratory Department of Electrical, Electronic and Telecommunication, Engineering and Naval Architecture (DITEN)

Business or sector Academia

From 01/01/2007 - 30/11/2019

# Associate Professor - SSD ING-INF/01 Electronics

Dept. of Electrical, Electronics, and Telecommunication Engineering and Naval Architecture, DITEN, University of Genoa, Genova, Italy

Business or sector Academia

From 01/12/1992- to 31/12/2006

# Assistant Professor - SSD ING-INF/01 Electronics

Dept. of Biophysical and Electronic Engineering DIBE, University of Genoa, Genova, Italy

Business or sector Academia

# **EDUCATION AND TRAINING**

From 1987 - to 1990

Ph.D. in Electronic Engineering and Computer Science (Curriculum: Microelectronics)

University of Genoa, Genova, Italy

 Artificial Neural Networks, Analog VLSI Implementation, CMOS Circuits, Multi Layer Perceptron, Back Propagation From 1978 - to 1985

Master Degree in Electronic Engineering

University of Genoa, Genova, Italy

Microprocessors, VLSI Implementation, CMOS Circuits, Circuit design, Arithmetic Circuits

**PERSONAL SKILLS** 

Mother tongue(s) Ita

Italian

Other language(s)

English - Level: B2

Job-related skills

Design of Digital and Analog (Integrated) Circuits, CMOS technology, ASIC design, Hardware Description Languages (VHDL).

Digital skills

MicroSoft Office, MatLab, Linux, Windows

**ADDITIONAL INFORMATION** 

Technology Transfer 4 Patents

Technology Transfer

Member of the Technical - Scientific Committee of the SIIT ScpA ( https://www.siitscpa.it/it/ )

Technology transfer

Co-founder and member of former academic spin-off

SMART TRACK S.R.L., Sede operativa: Via Greto di Cornigliano – SIIT, 16152 Genova (IT)

P. IVA e codice fiscale: 02291180996 Registro delle imprese di Genova n° 475168

Sito web: https://smarttrack.io/

Co-founder of former academic spin-off

INSYDE s.r.l.s., sede VIA PAOLO ANFOSSI 60/3, 16164 GENOVA GE

P.Iva e codice fiscale: 02261540997

Registro delle imprese di Genova n° 02261540997, REA GE 472837

https://www.insyde.eu/

Principal Investigator of Research

Projects

National Scientific Coordinator and Head of UniGE local Research Unit of the PRIN2007 (PROGRAMMI DI RICERCA SCIENTIFICA DI RILEVANTE INTERESSE NAZIONALE RICHIESTA DI COFINANZIAMENTO (DM n. 1175 del 18 settembre 2007)) Project: Tactile Sensing System for Humanoid Robots using Piezo-polymer-FET devices.

Principal Investigator of Research

Projects

Principal Investigator and Work Package Leader of "Roboskin: Skin-based Technologies and Capabilities for Safe, Autonomous and Interactive Robots", call for proposals 7th Framework Programme for Theme 3 "Information and Communication Technologies", Programme "Cooperation", FP7-ICT-2007-3-2-2 — Cognitive Systems, Interaction, Robotics (www.roboskin.eu), 01/05/2009 -

30/04/2012.

Principal Investigator of Research

Projects

Principal Investigator e Work Package Leader of H2020 RIA, Tactility (TACTIle feedback enriched virtual interaction through virtual realITY and beyond), Call. H2020-ICT-2018-3, proposal 856718, 2019, 2019 - 2022.

Principal Investigator of Research

Projects

H2020-MSCA-ITN-2018, (Marie Skłodowska-Curie Innovative Training Networks), Topic: MSCA-ITN-2018, Type of action: MSCA-ITN-ETN (European Training Networks), Proposal number: 813713, Proposal acronym: NeuTouch. 01/03/2019 – 01/03/2023.

Investigator of Research Projects

HORIZON-CL4-2021-DIGITAL-EMERGING-01, "Al-Powered Manipulation System for Advanced Robotic Service, Manufacturing and Prosthetics", **Type of Action:** HORIZON-RIA, **Acronym:** IntelliMan, https://intelliman-project.eu/ Number: 101070136, 01/09/2022 – 28/02/2026

Investigator of Research Projects

Robotics and AI for Socio-economic Empowerment ( <a href="https://www.raiseliguria.it/">https://www.raiseliguria.it/</a> ), 01/01/2022 – 31/08/2025, spoke 2, research project: Artificial-Intelligence (AI) Enabled Wearable haptics for assistive and rehabilitation devices

Principal Investigator of Research Projects

Principal Investigator of the project funded by Compagnia San Paolo (https://www.compagniadisanpaolo.it/), Project Title "Innovative ICT system to restore the sense of touch in patients with sensory deficit", grant no.: 2017.0559, 01/03/2018 - 30/06/2020.

**Evaluation Expert** 

ERC Starting Grant – EU 7<sup>th</sup> Framework Programme - REPRISE (MIUR) - Deutsche Forschungsgemeinschaft (German Research Foundation), <a href="https://www.dfg.de/en/index.jsp">https://www.dfg.de/en/index.jsp</a> - Austrian Science Fund (FWF), <a href="https://www.fwf.ac.at/en/">https://www.fwf.ac.at/en/</a> - International Cooperation Programme (PCI) of the National Commission for Scientific and Technological Research of the Government of Chile (CONICYT) <a href="https://www.conicyt.cl/">https://www.conicyt.cl/</a> - SWISS NATIONAL SCIENCE FOUNDATION, <a href="https://www.snsf.ch">http://www.snsf.ch</a> - Dutch Research Council (NWO) <a href="https://www.nwo.nl/en">https://www.nwo.nl/en</a>

**IEEE and CASS Activities** 

IEEE senior member.

Member of the IEEE Circuits and Systems Society, IEEE Solid State Circuit Society, IEEE Robotics and Automation Society, IEEE Engineering in Medicine and Biology Society, IEEE Sensors Council.

Member of the "Biomedical and Life Science Circuits and Systems", "Sensory Systems" technical Committees of the IEEE Circuits and Systems Society (CASS, https://www.ieee-cas.org/).

Member of the Steering Committee of IEEE Journal on Flexible Electronics.

IEEE Italy Sensors Chapter - https://r8.ieee.org/italy-sensors/ : Chair of the Tactile Sensors Technical committee.

Guest editor of Selected Papers from the 2019 IEEE International Symposium on Circuits and Systems (ISCAS) of IEEE Transactions on Biomedical Circuits and Systems (http://ieee-cas.org/pubs/tbiocas; Ker, M., Valle, M., Johnston, M.L., Guest editorial: Special issue on selected papers from IEEE ISCAS 2019, (2019) IEEE Transactions on Biomedical Circuits and Systems, 13 (6), art. no. 2945871, pp. 1125-1127. DOI: 10.1109/TBCAS.2019.2945871.

Guest Editor of the Special Issue on the 1st IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS 2019), Chang, R.C.-H., Lee, G.G.C., Delbruck, T., Valle, M., "Introduction to the Special Issue on the 1st IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS 2019)", (2019) IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 9 (4), art. no. 8924857, pp. 595-597. DOI: 10.1109/JETCAS.2019.2954760

Guest Editor of the Special Issue on the 2nd IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS 2020), Serrano-Gotarredona, T., Valle, M., Conti, F., Li, H., "Introduction to the Special Issue on the 2nd IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS 2020)", (2020) IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 10 (4), art. no. 9282735, pp. 403-405, DOI: 10.1109/JETCAS.2020.3040581

General Chair of the 6th International Conference on System-Integrated Intelligence. Intelligent, flexible and connected systems in products and production (SysInt2022, https://sysint-conference.org/), Genova (Italy), September 7 – 9, 2022.

Technical Program co-Chair of the 2nd IEEE INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE CIRCUITS AND SYSTEMS, AUGUST 31 - SEPTEMBER 4, 2020, GENOA, ITALY (https://www.aicas2020.eu/).

Steering committee member of the IEEE International Conference on Electronics, Circuits, and Systems since 2018.

Technical Program Committee co-chair of the IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS) 2020.

General chair of the 26th IEEE International Conference on Electronics, Circuits, and Systems, 2019 (www.ieee-icecs2019.org).General chair of the IEEE New Generation of Circuits and Systems (NGCAS) 2017.

Steering committee member of the IEEE New Generation of Circuits and Systems (NGCAS) Conference. Track Chair (Physical Sensors) of the IEEE Sensors Conference 2017, 2018.

Track co-chair (Digital Circuits and VLSI Systems) of the 16th IEEE International Conference on Electronics, Circuits, and Systems, 2009, ICECS 2009

Program Committee member of the 17th IEEE International Conference on Electronics, Circuits, and Systems, 2010.

Programme Committee member of the IEEE Conference on Ph.D. Research in Microelectronics and Electronics (PRIME), 2011, 2013, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024.

Review Committee member of the IEEE Sensors Conference since 2018

Review Committee member of the IEEE BioCAS Conference since 2017

Review committee member of the IEEE ISCAS Conference, since 2016

#### **Scientific Editorial Activities**

Editorial board member ( Section Board for 'Physical Sensors'

https://www.mdpi.com/journal/sensors/sectioneditors/physicalsensors ) of the journal MDPI Sensors, (ISSN 1424-8220; CODEN: SENSC9).

Guest Editor di tre Special Issue della rivista scientifica MDPI Sensors, (ISSN 1424-8220; CODEN: SENSC9): "Tactile Sensors and Sensing Systems", (

https://www.mdpi.com/journal/sensors/special issues/Tactile-Sensors ) 2013; ""Tactile Sensors and Sensing", (https://www.mdpi.com/journal/sensors/special issues/TSS), 2017; "Recent Advances in Tactile Sensors", a special issue of Sensors (ISSN 1424-8220), section "Physical Sensors", (https://www.mdpi.com/journal/sensors/special issues/raTactileSensors), 2019 - 2020.

Guest Editor del Special Issue (<a href="https://www.mdpi.com/journal/micromachines/special">https://www.mdpi.com/journal/micromachines/special</a> issues/Tactile Sensing Technology Systems ) della rivista scientifica MDPI Micromachines (ISSN 2072-666X): "Tactile Sensing Technology and Systems", 2019.

Genova 05/01/2024

Maurizio Valle