



Fulvio Mastrogiovanni

Associate professor

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Education and training

2008

Ph.D in Bioengineering Material Science and Robotics

University of Genoa - Genoa - IT

2003

Qualification as a registered Professional Engineer

Genoa - IT

2003

Laurea Degree in Computer Engineering

University of Genoa - Genoa - IT

Academic experience

2017 - ONGOING

Member of the Commission for International Relationships

University of Genoa - Genoa - IT

2014 - ONGOING

Responsible for the joint lab between University of Genoa and the Japan Advanced Institute of Science and Technology (JAIST) about Perception Knowledge and Behavior Development for Robots.

University of Genoa - Genoa - IT

2011 - ONGOING

Assistant Professor

University of Genoa - Genoa - IT

Work experience

2018 - ONGOING

Member of the Admission and Review Board Digital Tree AI.

Digital Tree AI - Genoa - IT

2017 - ONGOING

Member of the Board of Directions of the Italian Association for Artificial Intelligence.

Italian Association for Artificial Intelligence - Cesena - IT

Language skills

English

Proficient

Italian

Mother tongue

Teaching activity

- 2017 – **present time**. Social Robotics (4 credits) as part of the European Master on Advanced Robotics (EMARO – <http://emaro.irccyn.ec-nantes.fr/>), University of Genoa, Italy.
- 2015 – **present time**. Fundamentals of Computer Science (9 credits), University of Genoa, Italy.
- 2009 – **present time**. Software architectures for Robotics (5 credits), as part of the European Master on Advanced Robotics (EMARO – <http://emaro.irccyn.ec-nantes.fr/>), University of Genoa, Italy.
- 2012 – 2015. Fundamentals of Computer Science (12 credits), University of Genoa, Italy.

Postgraduate research and teaching activity

PhD committees membership

- 2016 - **present time**. Reference person for the curriculum 'Robotics and Autonomous Systems' of the Ph.D. School on Bioengineering and Robotics.

Research interests

- **Knowledge representation**: first order based models, description logic-based models, Allen's interval algebra, region connection calculus.
- **Planning and reasoning**: STRIPS based planning, PDDL(+) based planning, common-sense reasoning.
- **Tactile sensing for robots**: design, manufacturing, calibration, data acquisition, data processing, software architectures, data representation, control, tactile-based motion planning.
- **Human-robot interaction**: cooperation models, coordination models, physical human-robot interaction, and cognitive models.

Grants

2018 - ONGOING

Artificial Somatosensation for Humans and Humanoids (AH2)

Ministero Affari Esteri e Cooperazione Internazionale - Israeli Ministry of Science and Technology - IT

Participant

2017 - ONGOING

Culture-Aware Robots and Environmental Sensor Systems for Elderly Support (CARESSES)

European Commission (H2020)

Participant

2015 - ONGOING

European Master on Advanced Robotics Plus (EMARO+)

European Commission (ERASMUS+)

Participant

2015 - 2017

Wearable and Ambient Intelligence Make Assistive Robots Smarter (WearAmI)

Ministero Affari Esteri e Cooperazione Internazionale - Ministero Università e Ricerca - Swedish Research Council

Participant

2013 - 2015

Cloth Perception and Manipulation (CloPeMa)

European Commission (FP7)

Participant

2011 - 2014

A Secure Habitat for an Enhanced Long Life (SHELL)

Ministero Sviluppo Economico - IT

Principal investigator

2009 - 2012

Skin-Based Technologies and Capabilities for Safe Autonomous and Interactive Robots (ROBOSKIN)

European Commission (FP7)

Participant

Editorial activity

- 2014 – **present time**. Review Editor for Frontiers in Robotics and AI – Humanoid Robotics (Frontiers Media S.A.).
- 2014 – **present time**. Associate Editor for Robotics and Autonomous Systems, Elsevier, with a special appointment on “Innovation”.
- 2012 – **present time**. Senior Editor for Intelligent Service Robotics (Springer).

- 2018. Program co-chair for IEEE RO-MAN 2018.
- 2018. Co-organizer of the Workshop on “WORKMATE: the workplace is better with intelligent, collaborative, robot mates”, co-located with IEEE ICRA 2018, Brisbane, Australia.
- 2017. Workshop and Tutorial Chair for IEEE RO-MAN 2017.
- 2017. Co-organizer of the Workshop on “Towards a next generation of wearable robotic devices for human-oriented assistance and therapy”, co-located with IEEE ICORR 2017, London, U.K.
- 2017. Industry and Exhibition co-Chair for ERF 2017.
- 2016 – 2017. Guest co-editor for the Special Issue “Human-oriented approaches for assistive and rehabilitation robotics – engineering methods, technical implementation, and treatment”, *Robotics and Autonomous Systems*, issue 96 (Elsevier).
- 2016. Exhibition Chair for IEEE/RSJ IROS 2016.
- 2016. Workshop and Tutorial Chair for IEEE RO-MAN 2016.
- 2015. EU Program Chair for IEEE RO-MAN 2015.
- 2015. Guest co-editor for the Special Issue “Home Automation: a Human-centered perspective”, *IEEE Transactions on Automation Science and Engineering*, issue 12(4) (IEEE).
- 2014 – 2015. Guest co-editor for the Special Issue “Advances in Tactile Sensing and Touch-based Human-Robot Interaction”, *Robotics and Autonomous Systems*, issue 63 (Elsevier).
- 2014. EU Program Chair for DARS 2014.
- 2013. Program co-Chair for URAI 2013.
- 2013. EU Program Chair for IEEE RO-MAN 2013.
- 2012 – 2013. Guest co-editor for the Special Issue “Artificial Intelligence Techniques in Service Robotics” (Part I and II), *Intelligent Service Robotics*, issues 5(4) and 6(1) (Springer).
- 2012. Co-organizer of the Second Workshop on “Advanced in Tactile Sensing and Touch-based Human-Robot Interaction”, co-located with IEEE IROS 2012, Vilamoura, Portugal.
- 2012. Information Automation co-chair for IEEE CASE 2012.
- 2012. Co-organizer of the First Workshop on “Advanced in Tactile Sensing and Touch-based Human-Robot Interaction”, co-located with HRI 2012, Boston, MA, USA.
- 2012. Co-organizer of the Workshop “The ROBOSKIN Project: Results and Future Challenges”, co-located with CogSys 2012, Vienna, Austria.
- Reviewer for international journals: *ACM Computing Surveys*; *IEEE Transactions on Affective Computing*; *IEEE Transactions on Automation Science and Engineering*; *IEEE Transactions on Robotics*; *IEEE Transactions on System, Man and Cybernetics*; *Intelligent Service Robotics*; *Interaction Studies*; *International Journal of Advanced Robotic Systems*; *Journal of Intelligent and Robotic Systems*; *Robotics and Autonomous Systems*; *IEEE Robotics and Automation Letters*; *IEEE Transactions on Cognitive and Development Systems*; *Information Sciences*.
- Associate Editor / Member of the Program Committee for conferences: *AAAI* 2016; *BIBM* 2014; *HAI* 2014, 2018; *IAS-14*; *ICMIT* 2014; *ICOST* 2009–2014; *ICT Innovations* 2015, 2017; *IEEE CASE* 2012, 2013;

IEEE ICRA 2012–2018; IEEE RO-MAN 2011–2014, 2016, 2017; IEEE/RSJ IROS 2011, 2012, 2013, 2017, 2018; IJCAI 2017, 2018; Intelligent Environments 2009–2014; MoMM 2012–2014; Robotics: Science and Systems 2016, 2017, 2018; SmartE 2015.

Assignments abroad

- 2014 – **present time**. Software architectures for Robotics (5 credits), as part of the European Master on Advanced Robotics (EMARO – <http://emaro.irccyn.ec-nantes.fr/>), Ecole Centrale de Nantes, France.
- 2014 – **present time**. Affiliate Associate Professor at the Center for Intelligent Robotics, JAIST, Nomi, Japan.
- 2014. Visiting Professor at JAIST, Nomi, Japan.
- 2014. Visiting Professor at Keio University, Tokyo, Japan.
- 2013. Visiting Scholar at the Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany.
- 2012. Visiting Professor at Shanghai Jiao Tong University (SJTU), Shanghai, China.
- 2011. Visiting Professor at the Asian Institute of Technology (AIT), Bangkok, Thailand.

Other professional activities

- 2016 - **present time**. Founder and Chief Technical Officer, Teseo srl, Italy.