# FULVIO MASTROGIOVANNI IN BRIEF

### **EDUCATION**

2008. PhD in Bioengineering, Materials Science and Robotics from the University of Genoa, Italy.

2003. Laurea Degree in Computer Engineering from the University of Genoa, Italy (final grade: 108/100).

### ACADEMIC POSITIONS

2018 – present. **Associate Professor** at the University of Genoa, Italy (National Scientific Habilitation to the functions of Full Professor in sector 09/H1 obtained on 09/09/2019 and valid until 09/09/2025).

2014 – present. **Affiliate Associate Professor** at the Center for Intelligent Robotics, Japan Advanced Institute of Science and Technology, Nomi, Japan

2020. Visiting Professor at the Pontificia Universidad Catolica del Peru, Lima, Peru.

2014. Visiting Professor at the Japan Advanced Institute of Science and Technology, Nomi, Japan.

2014. Visiting Professor at Keio University, Tokyo, Japan.

2013. **Visiting Scholar** at the Karlsruhe Institute of Technology, Karlsruhe, Germany.

2012. Visiting Professor at Shanghai Jiao Tong University, Shanghai, China.

2011 – 2018. Assistant Professor at the University of Genoa, Italy.

2011. Visiting Professor at the Asian Institute of Technology, Bangkok, Thailand.

2009 – 2011. **Post-doc Research Associate** at the University of Genoa, Italy.

2004 – 2005. **Research Associate** at the University of Genoa, Italy.

### ACADEMIC SERVICE

2020 – present. Deputy Chancellor for International Affairs of the University of Genoa, Italy.

2019 - present. Contact Person, Heritage Network Association, EU-India.

2019 – present. **Program Coordinator** of the English-taught MSc in Robotics Engineering at the University of Genoa, associated with the Erasmus Mundus European Master on Advanced Robotics Plus and the Erasmus+ Japan-Europe Master on Advanced Robotics consortia.

2017 - present. Member, Scientific Board of the Italian School on Advanced Science in Kyoto, Japan.

2016 – present. Member, Board of the PhD School in Bioengineering and Robotics, University of Genoa, Italy.

2014 – present. **Team Coordinator**, TheEngineRoom, University of Genoa, Italy.

2018 – 2020. Member, Admission and Review Board, Digital Tree Startup Incubator, Genoa, Italy.

2017 – 2020, **Member**, Commission for International Relationships of the University of Genoa, Italy.

2014 – 2019. **Team Coordinator**, Joint Lab between the University of Genoa, Italy, and the Japan Advanced Institute of Science and Technology, Japan.

2017 – 2019. Member, Board of Directors of Italian Association for Artificial Intelligence, Italy.

### ORGANIZATION OF SCIENTIFIC EVENTS AND INITIATIVES

2020. Awards co-Chair for IEEE RO-MAN 2020.

2019. Workshops and Tutorials co-Chair for IEEE RO-MAN 2019.

2018. Program co-Chair for IEEE RO-MAN 2018.

2017. Workshops and Tutorials co-Chair for IEEE RO-MAN 2017.

2017. Industry and Exhibitions co-Chair for ERF 2017.

2016. Exhibitions Chair for IEEE-RSJ IROS 2016.

2016. Workshops and Tutorials Chair for IEEE RO-MAN 2016.

2015. EU Program Chair for IEEE RO-MAN 2015.

2014. EU Program Chair for DARS 2014.

2013. Program co-Chair for URAI 2013.

2013. EU Program Chair for IEEE RO-MAN 2013.

2012. Information & Automation co-Chair for IEEE CASE 2012.

Served as Senior or Associate Editor for 3 Q1 journals, and co-Organizer of 5 Special Issues in Q1 journals.

Co-Organizer of 5 international workshops co-located with major Robotics events, and 1 international PhD school.

Routinely served as **Associate Editor** for AAAI, ICRA, IROS, IJCAI, RO-MAN, RSS, and **Member of the Program Committee** of major international conferences in Artificial Intelligence and Robotics.

### PARTICIPATION TO FUNDED RESEARCH PROJECTS IN EDUCATION

2020 – present. Ulysseus. Local Coordinator. Erasmus European Universities, 4.9 M€.

2019 – present. JEMARO. Local Coordinator. Erasmus+, 1.7 M€.

2015 – 2020. EMARO. **Key Person**, later **Local Coordinator**. Erasmus Mundus, 1.8 M€.

### **TEACHING ACTIVITIES**

2020 - present. "Artificial Intelligence for Robotics II" (3 out of 5 ECTS credits), MSc in Rob. Eng.

- 2020 present. "Ambient Intelligence" (2 out of 4 credits), MSc in Rob. Eng.
- 2019 present. "Informatica per l'Ingegneria Industriale" (3 out of 6 credits), BSc in Mech. Eng..
- 2014 present. "Software Architectures for Robotics" (2 credits), Ecole Centrale de Nantes, France.
- 2009 present. "Software Architectures for Robotics" (5 credits), MSc in Rob. Eng.
- 2015 2021. "Fondamenti di Informatica" (5 out of 9 credits), BSc in Comp. Eng., University of Genoa, Italy.
- 2017 2020. "Social Robotics" (2 out of 4 credits), MSc in Rob. Eng.
- 2012 2015. "Fondamenti di Informatica" (12 credits), BSc in Comp. Eng., University of Genoa, Italy.
- Supervised or co-supervised 12 PhD students, as well as 55 MSc students.

### RESEARCH STATEMENT

My research activity lies at the intersection of Artificial Intelligence and Robotics, and is focused on scenarios related to human-robot interaction or collaboration. To this aim, I explore the use of different sensing modalities, semantic-oriented data processing techniques, knowledge representation and reasoning approaches, as well as action strategies to increase robots' autonomy and intelligence. All these aspects are integrated in the design of state-of-the art software architectures for robots. Furthermore, I am deeply interested in innovative models of cognition and computation, and in their use to design the robots of the future.

### PARTICIPATION TO FUNDED RESEARCH PROJECTS IN RESEARCH

- 2022 present. DynaVolc. Co-Principal Investigator. Italian PRIN funding scheme, 0.9 M€
- 2019 present. InDex. Co-Principal Investigator. H2020, CHIST-ERA, 1.1 M€.
- 2018 present. ASH^2. **Key Person**. Bilateral Italy-Israel International Cooperation, 0.2 M€.
- 2020 2021. MYWAI4ROBOTICS. Local Coordinator. H2020, DIH, 0.3 M€.
- 2017 2020. CARESSES. **Key Person**. H2020, 2.0 M€.
- 2013 2015. CloPeMa. **Key Person**. FP7, 1.7 M€.
- 2011 2014. SHELL, **Technical Coordinator**. Made in Italy Industria 2015, 1.0 M€.
- 2009 2012. ROBOSKIN. Management Coordinator. FP7, 3.1 M€.

Established research collaboration with many universities and research centers worldwide.

### TECHNOLOGY TRANSFER

- 2020 present. Founder, Chief Technical Officer, Intra-Operative Surgical Research srl.
- 2018 present. Artificial Intelligence Advisor, HIRO srl.
- 2015 present. Founder, Chief Technical Officer, and later Chief Research Officer, Teseo srl.

Established formal cooperation agreement schemes with many international companies and startups.

### HONORS, AWARDS, INVITATIONS

- 2020. Best Paper Award Finalist at HFR 2020.
- 2012. The 2012 IFSA Award for Young Scientist at FedCSIS 2012.
- 2010. Best Paper Award at IEEE RO-MAN 2010.
- 2008. Invited paper at ISUC 2008.
- 2008. Best Paper Award at DARS 2008.

Many additional awards for the work done jointly with the startup companies Teseo srl and HIRO srl.

Routinely given invited talks at PhD schools, workshops, universities and research centers, and scientific events.

## **PUBLICATIONS**

Outcomes (on 29/08/2022): **186** publications, out of which **1** edited book, **5** as editorials, **53** in international journals, **22** in book chapters, **101** in international conferences, symposia, and workshops, and **4** patents.

- Co-author of **22** Q1 journal papers according to Scimago Journal Rank (year 2022) in the subject area "Computer Science", **16** out of which in the period 2016 2022.
- Co-author of **36** papers in conference proceedings in such top or very good venues as CDC, FUZZ-IEEE, ICRA, IJCAI, IROS, ISER, ISRR, LPNMR, RO-MAN.

Impact: 2239 citations and h-index 28 (on Google Scholar), 1347 citations and h-index 22 (Scopus).