FULVIO MASTROGIOVANNI IN BRIEF

Associate Professor. Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genoa, Italy.

Honorary Expert, Principal Investigator. Shanghai Polytechnic University, Shanghai, China.

PERSONAL INFORMATION

Birth: June 6th, 1977
Nationality: Italian
Residence: Via G. Mameli 4/6, 16122, Genoa, Italy
Mailbox: Via Opera Pia 13, 16145, Genoa, Italy
Email: fulvio.mastrogiovanni@unige.it

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

2025 – present. **Honorary Expert**. Shanghai Polytechnic University, Shanghai, China.
2018 – present. **Associate Professor**, 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 09/09/2029).
2026. **Visiting Professor**, Pontificia Universidad Catolica del Peru, Lima, Peru.
2024. **Visiting Professor**, Shanghai Polytechnic University, Shanghai, China.
2023 – 2025. **Affiliate Researcher**, Robotics, Brain, and Cognitive Sciences Unit, Istituto Italiano di Tecnologia, Genoa, Italy.
2020. **Visiting Professor**, Pontificia Universidad Catolica del Peru, Lima, Peru.
2014 – 2020. **Affiliate Associate Professor**, Center for Intelligent Robotics, Japan Advanced Institute of Science and Technology, Nomi, Japan.
2014. **Visiting Professor**, Japan Advanced Institute of Science and Technology, Nomi, Japan.
2014. **Visiting Professor**, Keio University, Tokyo, Japan.
2013. **Visiting Scholar**, Karlsruhe Institute of Technology, Karlsruhe, Germany.
2012. **Visiting Professor**, Shanghai Jiao Tong University, Shanghai, China.
2011 – 2018. **Assistant Professor**, University of Genoa, Italy.
2011. **Visiting Professor**, Asian Institute of Technology, Bangkok, Thailand.
2009 – 2011. **Post-doc Research Associate**, University of Genoa, Italy.
2004 – 2005. **Research Associate**, University of Genoa, Italy.

ACADEMIC SERVICE

2024 – present. **Head of Board**, Scientific Board of the Digital Innovation Hub – Liguria, Genoa, Italy.
2024 – present. **Member**, International Affairs Board, University of Genoa, Italy.
2022 – present. **Member**, Board of the National PhD School in Robotics.
2016 – present. **Member**, Board of the PhD School in Bioengineering and Robotics, University of Genoa, Italy.
2014 – present. **Principal Investigator**, TheEngineRoom, University of Genoa, Italy.
2023 – 2025. **Member**, Technology Transfer Board, University of Genoa, Italy.
2020 – 2023. **Member**, Scientific Board, Uni-Italia Association, Rome, Italy.
2020 – 2023. **Deputy Rector for International Affairs**, University of Genoa, Italy.
2019 – 2025. **Contact Person**, Heritage Network Association, EU – India.
2019 – 2022. **Head of Program**, international MSc in Robotics Engineering at the University of Genoa, associated with the Erasmus Mundus European Master on Advanced Robotics (EMARO/EMARO+) and the Erasmus Japan-Europe Master on Advanced Robotics (JEMARO) consortia.
2018 – 2020. **Member**, Admission and Review Board, Digital Tree Startup Incubator, Genoa, Italy.
2017 – 2020. **Member**, Scientific Board, Italian School on Advanced Science in Kyoto, Japan.
2017 – 2020, **Member**, International Relationships Board, University of Genoa, Italy.
2017 – 2019. **Member**, Board of Directors of the Italian Association for Artificial Intelligence, Italy.

2014 – 2019. **Principal Investigator**, Joint Lab on Cognitive Robotics, University of Genoa and Japan Advanced Institute of Science and Technology.

ORGANIZATION OF SCIENTIFIC EVENTS AND INITIATIVES

2025. **General Chair**, IAS 2025.
2025. **Scientific Chair**, The Robot Valley – Genoa, 2025.
2024. **Scientific Chair**, The Robot Valley – Genoa, 2024.
2020. **Awards co-Chair**, IEEE RO-MAN 2020.
2019. **Workshops and Tutorials co-Chair**, IEEE RO-MAN 2019.
2018. **Program co-Chair**, IEEE RO-MAN 2018.
2017. **Workshops and Tutorials co-Chair**, IEEE RO-MAN 2017.
2017. **Industry and Exhibitions co-Chair**, ERF 2017.
2016. **Exhibitions Chair**, IEEE-RSJ IROS 2016.
2016. **Workshops and Tutorials Chair**, IEEE RO-MAN 2016.
2015. **EU Program Chair**, IEEE RO-MAN 2015.
2014. **EU Program Chair**, DARS 2014.
2013. **Program co-Chair**, URAI 2013.
2013. **EU Program Chair**, IEEE RO-MAN 2013.
2012. **Information & Automation co-Chair**, IEEE CASE 2012.
Served as **Senior** or **Associate Editor** for **5** Q1 journals, and **co-Organizer** of **6** Special Issues in Q1 journals.
Main Organizer of **1** major international conference, co-Organizer of **7** 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

2024 – present. PATH. **Local Coordinator**, Erasmus+, 0.2 M€ overall.
2023 – present. Ulysseus 2.0. **Innovation Hub Coordinator**, Erasmus European Universities, 11.2 M€ overall.
2022 – present. IRAS-HUB. **Local Coordinator**, Erasmus+, 0.8 M€ overall.
2019 – present. JEMARO. **Local Coordinator**, Erasmus+, 1.7 M€ overall.
2020 – 2023. Ulysseus. **Local Coordinator** (appointed), Erasmus European University Alliances, 4.9 M€ overall.
2015 – 2020. EMARO+. **Key Person**, later **Local Coordinator**. Erasmus Mundus, 1.8 M€ overall.

TEACHING ACTIVITIES

2025 – present. "**Computer Architectures**" (4 ECTS, English), BSc in Comp. Eng., University of Genoa, Italy.
2024 – present. "**Medical Robotics**" (1 ECTS, English), IANUA School for Advanced Studies, Medical Technologies, and Digital Health, University of Genoa, Italy.
2024 – present. "**Cognitive Architectures for Robotics**" (5 ECTS, English), MSc in Rob. Eng., University of Genoa, Italy.
2020 – present. "**Artificial Intelligence for Robotics II**" (5 out of 5 ECTS, English), MSc in Rob. Eng.
2020 – 2024. "**Ambient Intelligence**" (2 out of 4 ECTS, English), MSc in Rob. Eng.
2019 – 2024. "**Informatica per l'Ingegneria Industriale**" (3 out of 6 ECTS, Italian), BSc in Mech. Eng.
2014 – 2024. "**Software Architectures for Robotics**" (2 ECTS, English), Ecole Centrale de Nantes, France.
2009 – 2023. "**Software Architectures for Robotics**" (5 ECTS, English), MSc in Rob. Eng.
2015 – 2021. "**Fondamenti di Informatica**" (5 out of 9 ECTS, Italian), BSc in Comp. Eng.
2017 – 2020. "**Social Robotics**" (2 out of 4 ECTS, English), MSc in Rob. Eng.
2012 – 2015. "**Fondamenti di Informatica**" (12 ECTS, Italian), BSc in Comp. Eng.
Supervised or co-supervised **23** PhD students, as well as **90+** MSc students.

RESEARCH STATEMENT

My research activities lie at the intersection of Artificial Intelligence and Cognitive Robotics, in the field now referred to as "embodied Artificial Intelligence" or "physical Artificial Intelligence". As an engineer, I strive at addressing real-world challenges by integrating highly speculative computational theories with bio-inspired approaches. To this aim, (1) I explore the use of different sensing modalities, perception models, semantic-oriented data processing techniques, knowledge representation and reasoning approaches, as well as action planning and motion execution strategies, (2) to design cognitive architectures for embodied agents aimed at increasing their

autonomy, intelligence, and capability to understand their environment and purposely interact with humans, (3) which employ innovative models of cognition and computation, leverage knowledge of human cognitive models, and exploit their bodies and morphology. All these aspects are integrated in the design of state-of-the art computational models, which I deem fundamental to design the robots of the future.

PARTICIPATION TO FUNDED RESEARCH PROJECTS IN RESEARCH

2025 – present. CONCERTO. **Key Person**. MIUR, PRIN, 400 k€ overall
2024 – present. SENSE-NN. **Principal Investigator**, Leonardo Solvers Wanted Program, 30 k€ overall.
2022 – present. DHEAL-com. **Key Person**. MIUR, PNRR Comp., 78 M€ overall.
2022 – present. Fit4MedRob. **Key Person (resp. for Deliverable 9.2)**. MIUR, PNRR Comp. 128 M€ overall.
2022 – present. RAISE. **Key Person (resp. for Milestone 5)**. MIUR, PNRR Ecosistemi, 114 M€ overall.
2024 – 2026. DIVER+. **Scientific Coordinator**. Regione Liguria, POR FESR, 930 k€ overall.
2022 – 2025. DynaVolc. **Principal Investigator**. MIUR, PRIN, 900 k€ overall.
2020 – 2021. MYWAI4ROBOTICS. **Principal Investigator**. EC, H2020, DIH, 300 k€ overall.
2019 – 2022. InDex. **Principal Investigator**. EC, H2020, CHIST-ERA, 1.1 M€ overall.
2018 – 2021. ASH^2. **Key Person**. MAECI, Bilateral Italy-Israel International Cooperation, 200 k€ overall.
2017 – 2020. CARESSES. **Key Person**. EC, H2020, 2.0 M€ overall.
2013 – 2015. CloPeMa. **Key Person**. EC, FP7, 1.7 M€ overall.
2011 – 2014. SHELL, **Scientific Coordinator**. MISE, Made in Italy – Industria 2015, 1.0 M€ overall.
2009 – 2012. ROBOSKIN. **Management Coordinator**. EC, FP7, 3.1 M€ overall.
Established formal research collaboration schemes with many **universities and research centers worldwide**.

TECHNOLOGY TRANSFER

2025 – present. **Artificial Intelligence Advisor**, Fusion AI Labs srl.
2015 – present. **Founder**, Chief Technical Officer, and later Chief Research Officer, Teseo srl.
2024 – 2025. **Artificial Intelligence Advisor**, Netalia srl.
2020 – 2025. **Founder**, Artificial Intelligence Advisor, Intra-Operative Surgical Research srl.
2018 – 2022. **Artificial Intelligence Advisor**, HIRO srl.
Established cooperation agreement schemes with many **national** and **international companies and startups**.

HONORS, AWARDS, INVITATIONS

2025. **Invited**, Shonan Meeting on "Cognitive Robotics".
2025. **Best Paper Award Candidate**, ICDL 2025.
2021. **National Award**, Associazione Nazionale Giovani Innovatori 2021.
2020. **Best Paper Award Finalist**, HFR 2020.
2012. **IFSA Award for Young Scientist**, FedCSIS 2012.
2010. **Best Paper Award**, IEEE RO-MAN 2010.
2008. **Invited paper**, ISUC 2008.
2008. **Best Paper Award**, DARS 2008.
Many additional awards for the work done jointly **with the startup companies** Teseo srl and HIRO srl during my period as Advisor.
Routinely given **invited talks** at PhD schools, workshops, universities, research centers, and scientific events.

SUMMARY OF PUBLICATIONS

Outcomes (on March 24th, 2026): **259** publications, out of which **2** edited books, **5** as editorials, **71** in international journals, **23** in book chapters, **151** in international conferences, symposia, and workshops, and **7** patents.

- Co-author of **33** Q1 journal papers according to Scimago Journal Rank (year 2025) in the subject area "Computer Science".
- Co-author of papers in conference proceedings in such top or very good venues as CDC, FUZZ-IEEE, ICRA, IJCAI, IROS, ISER, ISRR, LPNMR, RO-MAN.

Impact: **4262** citations and h-index **35** (on Google Scholar), **2531** citations and h-index **29** (Scopus).

CURRICULUM VITAE OF FULVIO MASTROGIOVANNI

Associate Professor. Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genoa, Italy.

Honorary Expert, Principal Investigator. Shanghai Polytechnic University, Shanghai, China.

PERSONAL INFORMATION

- Birth: June 6th, 1977
- Nationality: Italian
- Residence: Via G. Mameli 4/6, 16122, Genoa, Italy
- Mailbox: Via Opera Pia 13, 16145, Genoa, Italy
- Email: fulvio.mastrogiovanni@unige.it

EDUCATION

- March 2008: **Doctor of Philosophy** in Bioengineering, Materials Science and Robotics from the University of Genoa, Italy.
- November 2003: Qualification as a registered *Professional Engineer*.
- July 2003: **Laurea Degree** in Computer Engineering from the University of Genoa, Italy (final grade: 108/100).

ACADEMIC POSITIONS

- May 2025 – *present*

  Institution. Shanghai Polytechnic University, Shanghai, China.
  Role. **Honorary Expert, Principal Investigator**.
  Key activities. Mentoring of MSc and PhD students, and post-doc research affiliates. Principal Investigator of the joint lab on Robotics Technologies between University of Genoa, Shanghai Polytechnic University, and Siasun Robotics. The lab investigates the design and development of embodied, cognitive and intelligent behaviors for next-generation humanoid robots.

- December 2018 – *present*

  Institution. Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genoa, Italy.
  Role. **Associate Professor** (National Scientific Habilitation to the functions of Full Professor in sector 09/H1 obtained on 09/09/2019 and valid until 09/09/2029).
  Key activities. Teaching at the undergraduate, graduate, and post-graduate levels. Mentoring of MSc students, PhD students and post-doc research affiliates. Principal Investigator of TheEngineRoom, a research lab focusing on embodied and cognitive robotics (8 PhD students and 2 research associates, plus me). Involvement in various Department-level (Research Board, Contact Person for International Relationships), School-level (International Relationships Board) and University-level (International Relationships Board, Deputy Rector for International Affairs, Technology Transfer Board) duties.

- February 2026

  Institution. Pontificia Universidad Catolica del Perù, Lima, Perù.
  Role. **Visiting Professor**.
  Key activities. Identification of common research activities, specifically in the fields of social robotics and human-robot interaction. Discussions about a possible double degree MSc program in Robotics and Mechatronics between the institution and the University of Genoa. Supervision of two PhD students in co-tutelle.

- June 2024

Institution. Shanghai Polytechnic University, Shanghai, China.
Role. **Visiting Professor**.
Key activities. Identification of joint research activities, with a specific emphasis on embodied and cognitive robotics. Definition of common strategies for industry-oriented research work. Discussions to establish a joint lab about robotics technologies between the University of Genoa and Shanghai Polytechnic University.

- July 2023 – 2025

  Institution. Robotics, Brain, and Cognitive Sciences Unit, Istituto Italiano di Tecnologia, Genoa, Italy.
  Role. **Affiliate Researcher**.
  Key activities. Mentoring of PhD students and post-doc research affiliates. Work on the iCog initiative[1] for the design and development of an open-source cognitive architecture for robots. In that context, worked on the identification of possible strategies for the integration of advanced reasoning capabilities in the iCog architecture, as well as the definition of suitable artificial intelligence methodologies.

- January 2020 – February 2020

  Institution. Pontificia Universidad Catolica del Perù, Lima, Perù.
  Role. **Visiting Professor**.
  Key activities. Identification of synergistic research activities, including the setup of a worldwide consortium to participate to the XPRIZE Rainforest Challenge[2]. Definition of a possible double degree MSc program in Robotics and Mechatronics between the institution and the University of Genoa.

- March 2014 – *February 2020*

  Institution. Center for Intelligent Robotics, Japan Advanced Institute of Science and Technology, Nomi, Japan.
  Role. **Affiliate Associate Professor**.
  Key activities. Mentoring of PhD students and post-doc research affiliates. Coordination of a newly established joint lab between the institution and the University of Genoa on cognitive robotics. This relationship contributed to the definition of the funded H2020 CARESSES project consortium.

- February 2014 – March 2014

  Institution. Japan Advanced Institute of Science and Technology, Nomi, Japan.
  Role. **Visiting Professor**.
  Key activities. Established a formal cooperation agreement between the institution and the University of Genoa, which resulted in a new joint lab. Definition of joint research directions and plan of subsequent research activities in human-robot interaction. This activity led to 6 students from the University of Genoa conduct joint research for the MSc thesis at the institution, with scholarships.

- January 2014 – February 2014

  Institution. Keio University, Tokyo, Japan.
  Role. **Visiting Professor**.
  Key activities. Definition of joint research directions between the institution and the University of Genoa, specifically in the field of wearable sensing and human activity recognition, which resulted in 6 students from the University of Genoa obtaining scholarships to carry out joint research work at the institution.

- January 2013 – February 2013

  Institution. Karlsruhe Institute of Technology, Karlsruhe, Germany.
  Role. **Visiting Scholar**.
  Key activities. Learned models and methodologies to integrate applied research and technology transfer, including the role played by startup companies as well as the cooperation with established industry. This background was later explored by me in defining cooperation and technology transfer models between research and the industry via startup companies, which I have co-founded.

- September 2012

  Institution. Shanghai Jiao Tong University, Shanghai, China.

[1] Web: https://icog.eu/.
[2] Web: https://www.xprize.org/prizes/rainforest.

Role. **Visiting Professor**.
Key activities. Established joint research activities in the field of artificial intelligence techniques for robotics, including legged locomotion, environment perception, action-task planning for space maintenance operations. In the years that followed, 3 students from the University of Genoa conducted joint research activities for their MSc thesis at the institution, funded by scholarships.

- November 2011 – November 2018

  Institution. Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genoa, Italy.
  Role. **Assistant Professor**.
- *Key activities*. Teaching at the undergraduate and graduate levels. Mentoring of MSc students, PhD students and post-doc research affiliates. Establishment of the new multi-disciplinary research team TheEngineRoom to work on human-robot interaction, in newly acquired lab space.
- August 2011 – September 2011

  Institution. Asian Institute of Technology, Bangkok, Thailand.
  Role. **Visiting Professor**.
  Key activities. Definition of joint research activities in the field of perception for robot navigation.
- October 2008 – October 2011

  Institution. Department of Informatics, Systemics, and Telematics, University of Genoa, Italy.
  Role: **Post-doc Research Associate**.
  Key activities. I was supervising the team working on the EC-funded project ROBOSKIN, which the University of Genoa coordinated, aimed at developing large-scale tactile sensing technology for robots. I also carried out work on embedded computing and networking, real-time data acquisition and tactile data processing, design of a distributed, tactile-based software architecture for robot control, and knowledge representation and reasoning on tactile data.
- October 2004 – December 2005

  Institution. Department of Informatics, Systems, and Telematics, University of Genoa, Italy.
  Role: **Research Associate**.
  Key activities. Worked on different research topics, namely human behavior monitoring in assisted living scenarios, navigation for wheeled service robots, ontology-based knowledge representation and reasoning.

ACADEMIC SERVICE

- February 2024 – *present*

  Board. Digital Innovation Hub – Liguria, Genoa, Italy.
  Role. **Head of Board**.
  Key activities. Identification of strategic innovation directions, specifically concerning the introduction of embodied AI technologies in the regional ecosystem. Coordination of regional initiatives concerning Artificial Intelligence and related technologies.
- February 2024 – *present*

  Board. International Affairs Board, University of Genoa, Italy.
  Role. **Member**.
  Key activities. Strategic outreach for international cooperation agreements and alliances, with a specific emphasis on Japanese universities. Organization of the participation of the University of Genoa to Expo Osaka 2025.
- October 2022 – *present*

  Board. National PhD School in Robotics.
  Role. **Member**.
  Key activities. Management of students' selection activities, annual evaluations, final defenses.
- October 2016 – *present*

  Board. PhD School in Bioengineering and Robotics, University of Genoa, Italy.

Role. **Member**.
Key activities. Coordinator of the curriculum in "Robotics and Autonomous Systems" (until 2021). Management of students' selection activities, annual evaluations, final defenses.

- December 2014 – *present*

  Team. Multi-disciplinary research team TheEngineRoom, University of Genoa, Italy.
  Role. **Principal Investigator**.
  Key activities. Identification of strategic research directions. Coordination of the research group. Mentoring. Project proposals. TheEngineRoom focuses on embodied AI and cognitive robotics. Currently, it includes 8 PhD students, 2 research associates, 9 MSc students, and me. The team has been established from scratch, and it required the acquisition of new lab space (currently, approximately 150 m^2). After 10 years, the team is involved in a series of funded, national, and international projects, and collaborates with many research groups and companies worldwide. In the past few years, it was able to secure funding to acquire various equipment, including 2 motion tracking systems from OptiTrack ltd, 3 wheeled platforms (1 Husqwarna A330X platform, 1 custom mobile robot, and 1 MIRO robot), 1 quadruped robot from Unitree Robotics, 1 Baxter dual-arm manipulator, 1 dual-arm Tiago++ mobile manipulator, 2 Franka Emika Panda, and various sensing devices, also jointly with other research groups. Currently, orders have been placed to buy other 1 humanoid robot from Unitree, 1 wheeled quadruped from PUMA Robotics, 2 Nero manipulators from AgileX, and another outdoor mobile robot.

- October 2023 – October 2025

  Board. Technology Transfer Board, University of Genoa, Italy.
  Role. **Member**.
  Key activities. Management of IPR matters, relationships with external investors and funding sources, implementation of specialized programs.

- December 2020 – July 2023

  Association. Scientific Board of Uni-Italia, Rome, Italy.
  Role. **Member**.
  Key activities. Uni-Italia[3] is an Association whose goal is to promote the University-level educational system in Italy. It depends on the Directorate General for Public and Cultural Diplomacy, Ministry of Foreign Affairs and International Cooperation. I was part of the Scientific Board (as per my role as Deputy Rector for International Affairs) and involved in several initiatives as part of two working groups.

- December 2020 – July 2023

  University. University of Genoa.
  Role. **Deputy Rector (Prorettore) for International Affairs**.
  Key activities. In full synergy with the Rector, the Deputy Rector, the Rector's Delegates, and the General Director, definition of the strategic vision and directions for the international outlook of the University of Genoa (part of the 2021-2026 Strategic Plan of the University). Supervision of the International Relations area (4 different offices), and strict collaboration with the office for International Research. Coordination of the International Relationships Board (28 people), the Committee for International Educational Programs (21 people), the Committee for Reputation and Ranking (9 people – University of Genoa has gained more than 120 positions in the world-famous QS international ranking[4] while I was in office, from the range 651-700 to position 530), the Committee for the Foreign Language Policies (6 people), the Erasmus European University Alliance project Ulysseus[5] task force (22 people). Supervision and submission of project proposals for international funding in education and mobility (more than 0.5 M€ secured funding), development of a new follow-up project proposal, called Ulysseus 2.0, as European University Alliance (more than 11 M€ funding, out of which 1.8 M€ secured for the University of Genoa). Establishment of new cooperation initiatives, for examples Memoranda of Understanding (more than 60 agreements with worldwide institutions signed or in preparation, many of which with very prestigious Universities, such as Georgetown University, University of Berkeley, Florida International University, San Francisco State

[3] Web: http://home.uni-italia.it/en/students/
[4] Web: https://www.topuniversities.com/universities/university-genoa#:~:text=Rankings%20%26%20ratings,-RANKINGS&text=University%20of%20Genoa%20is%20one,QS%20World%20University%20Rankings%202024.
[5] Web: https://ulysseus.eu/.

University, Westminster School of Economics, Shanghai Polytechnic University, Polytechnic University of Monterrey), double and joint degree initiatives (more than 12 new double degree agreements signed or in preparation), new international study programs (for example, MSc in Economy and Data Science, MSc in Architectural Composition, MSc in Digital Humanities, the BSc in Computer Engineering – from 2024), new international cooperation projects at the University level. Coordination of the participation of the University of Genoa to international events (Expo Dubai[6], Ocean Race Europe and Ocean Race World[7], NAFSA[8] and EAIE[9]). Coordination of all the activities for international marketing (more than 15 events per year), as well as definition of the global policies for the recruitment of international students (approximately 3200 non-EU applicants in 2020, 9600 in 2021, 16000 in 2022, 21000 in 2023). Design and supervision for the development of advanced IT solutions for the management of international students' applications. Definition of strategies and activities for increasing the number of residences for international students. Management of local consequences on students and scholars because of international geopolitical events, such as the Taliban rise of power in Afghanistan, student protests in Iran, and the Russian invasion of Ukraine.

- September 2019 – 2025

  Association. Heritage Network[10].
  Role. **Contact Person**.
  Key activities. International relationships, definition of joint curricula, organization of summer schools, and students' mentoring. The Heritage Network is meant at strengthening teaching and research activities between European and many Indian Institutes of Technology, and involves frequent visits to India, research periods, and the planning of joint projects.

- July 2019 – 2025

  Team. Joint lab for Emerging Technologies in Simulation (JETS[11]), University of Genoa, Italy.
  Role. **Member**.
  Key activities. Identification of strategic research directions. Coordination of the joint research group. Identification of promising technology to be evaluated for simulation and training of future medical doctors and professional caregivers. Supervision of MSc theses.

- February 2019 – December 2022

  Study program. MSc in Robotics Engineering, University of Genoa, affiliated with the European Master on Advanced Robotics Plus[12] (EMARO+), and the Japan-Europe Master on Advanced Robotics[13] (JEMARO) Erasmus+ programs.
  Role. **Head of Study Program**.
  Key activities. Program coordination. Definition of the syllabus. International relationships. Management of 3 double degree agreements. Building of an Industry Board. Management of enrollment procedures. Management of students' selection and mentoring. The international, English-taught MSc in Robotics Engineering is active from 2015, and it is the local track of EMARO+, which has been funded twice by the European Commission using the Erasmus Mundus and the Erasmus+ program, and from 2020 also the local track of JEMARO, funded again by the European Commission. The two Consortia are similar and are made up by Ecole Centrale de Nantes (Coordinator for both programs), University of Genoa, Warsaw University of Technology, Universität Jaume-I, Shanghai Jiao Tong University, and Keio University. The curriculum is nowadays well-known to the Robotics community, it attracts many applications (almost 500 applications for the local track in 2019, approximately 700 in 2020, and consistently more than 1100 from 2021 onwards). I acted as Deputy Head of Program from its beginning, and Head of Program from 2019. I have been re-elected in May 2021 for a second, 3-year term, and resigned in December 2022 to focus on other, institutional activities.

---

[6] Web: https://www.expo2020dubai.com/.
[7] Web: https://www.theoceanrace.com.
[8] Web: https://www.nafsa.org/conferences/nafsa-2023-annual-conference-expo.
[9] Web: https://www.eaie.org/.
[10] Web: http://heritagenetwork.org/.
[11] Web: https://simav.unige.it/en/lab_dibris.
[12] Web: https://master-emaro.ec-nantes.fr/.
[13] Web: https://master-jemaro.ec-nantes.fr/.

- March 2018 – December 2020

  Board. Admission and Review Board, Digital Tree[14].
  Role. **Member**.
  Key activities. Periodic startup selection and mentoring (technical and business aspects), with a specific emphasis on AI-based deep tech. Participation to open innovation sessions with Italian companies. Digital Tree was an artificial intelligence focused incubator backed by SoftJam srl[15], and Mixura srl[16], now part of PWC. The incubator enforced the contamination of the typical lean startup culture with more business-oriented activities. This activity led me to interact with important companies and venture capital firms, which affected some of the technology transfer activities I was later involved with.

- December 2017 – December 2021

  Board. Italian School on Advanced Science in Kyoto, Japan, delegated by the Rector of the University of Genoa, Italy.
  Role. **Member**.
  Key activities. Definition of a joint Italy-Japan cooperation strategy for scientific purposes. The Italian School of Advanced Science in Kyoto is an effort carried out under the patronage of the Conferenza dei Rettori delle Università Italiane (CRUI), and of the Italian Consulate in Kyoto. It includes 26 Italian Universities and 5 Japanese Universities.

- December 2017 – December 2020

  Board. Commission for International Relationships, University of Genoa, Italy.
  Role. **Member**.
  Key activities. Travels as a representative of the University of Genoa in Central Asia, India, China, and Japan for international partnership purposes. Definition of a strategy to increase the international outlook of the University. I have been involved in activities related to international marketing appointed by the Rector of the University of Genoa in Turkey, Tajikistan, Uzbekistan, Kazakhstan, Azerbaijan, India (7 cities), and China, which involved giving presentations about all teaching offering (mostly focusing on the one delivered in English) at the University of Genoa, as well as mentoring prospective students. This activity was instrumental for my later appointment as Deputy Rector for International Affairs.

- December 2017 – December 2019

  Board. Board of Directions of the Italian Association for Artificial Intelligence[17].
  Role. **Member**.
  Key activities. Organization of annual awards ("Premio Lesmo", "Premio Cadoli", and "Premio Somalvico") at the annual meeting of the Association. Strategy definition. The Italian Association for Artificial Intelligence is an Academia and business-oriented player whose aim is to strengthen the knowledge, and the adoption of Artificial Intelligence based solutions. It enables different academic and industrial player to match and collaborate.

- December 2014 – December 2019

  Lab. Joint Lab between the University of Genoa, Italy, and the Japan Advanced Institute of Science and Technology, Nomi, Japan, about "Cognitive Robotics".
  Role. **Team Coordinator**.
  Key activities. Identification of research directions. Coordination of the joint research group. Student exchanges. This activity led to the supervision of 2 post-docs and 2 PhD students at the Japanese institution, the mobility of 6 students from the University of Genoa to Japan for joint research, the organization of scientific events, and was instrumental to setup the EC-funded project CARESSES.

ORGANIZATION OF SCIENTIFIC EVENTS AND INITIATIVES

Participation to editorial boards of international journals

[14] Web: https://digitaltree.ai/.
[15] Web: https//www.softjam.it.
[16] Web: https//www.mixura.com.
[17] Web: https://aixia.it/.

- 2026

  Journal. Special Issue on "Selected papers from the 19th International Conference on Intelligent Autonomous Systems", Robotics and Autonomous Systems, *to appear*.
  Role. **Guest co-Editor**.

- February 2026 – *present*

  Journal. Scientific Reports[18], Springer-Nature.

  Role. **Associate Editor**.

- May 2023 – *present*

  Journal. Frontiers in Neurorobotics[19], Frontiers Media.

  Role. **Associate Editor**.

- June 2014 – *present*

  Journal. Robotics and Autonomous Systems, Elsevier[20].
  Role. **Associate Editor**.

- September 2020 – December 2022

  Journal. IEEE Robotics and Automation Letters[21], IEEE.

  Role. **Associate Editor**.

- 2016 – 2017

  Journal. Special Issue on "Human-oriented approaches for assistive and rehabilitation robotics – engineering methods, technical implementation, and treatment", Robotics and Autonomous Systems, issue 96.
  Role. **Guest co-Editor**.

- *2015*

  Journal. Special Issue "Home Automation: a Human-centered perspective", IEEE Transactions on Automation Science and Engineering, issue 12(4).
  Role. **Guest co-Editor**.

- 2014 – 2015

  Journal. Special Issue "Advances in Tactile Sensing and Touch-based Human-Robot Interaction", Robotics and Autonomous Systems, issue 63.
  Role. **Guest co-Editor**.

- April 2012 – December 2019

  Journal. Intelligent Service Robotics[22], Springer-Nature.
  Role. **Senior Editor**.

- 2012 – 2013

  Journal. Special Issue "Artificial Intelligence Techniques in Service Robotics" (Part I and II), Intelligent Service Robotics, issues 5(4) and 6(1).
  Role. **Guest co-Editor**.

Organization of international conferences and symposia

- July 2025

  Event. 19th International Conference on Intelligent Autonomous Systems (IAS), Genoa, Italy.

[18] Web: https://www.nature.com/srep/.
[19] Web: https://www.frontiersin.org/journals/neurorobotics.
[20] Web: https://www.journals.elsevier.com/robotics-and-autonomous-systems.
[21] Web: https://www.ieee-ras.org/publications/ra-l.
[22] Web: https://www.springer.com/journal/11370.

Role. **General Chair**.

- May 2025

  Event. The Robot Valley - Genoa, Genoa, Italy.
  Role. **Scientific Chair**.

- April 2024

  Event. The Robot Valley - Genoa, Genoa, Italy.
  Role. **Scientific Chair**.

- August 2020

  Event. 29th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), Naples, Italy (LiveSHINE:A-, MA:A-).
  Role. **Awards co-Chair**.

- August 2019

  Event. 28th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), New Delhi, India (LiveSHINE:A-, MA:A-).
  Role. **Workshops and Tutorials co-Chair**.

- August 2018

  Event. 27th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Nanjing, China (LiveSHINE:A-, MA:A-).
  Role. **Program co-Chair**.

- August 2017

  Event. 26th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Lisbon, Portugal (LiveSHINE:A-, MA:A-).
  Role. **Workshops and Tutorials Chair**.

- March 2017

  Event. European Robotics Forum 2017 (ERF), Edinburgh, Scotland.
  Role. **Industry and Exhibitions co-Chair**. It is worth noting that I was the only member of the ERF 2017 Organizing Committee not affiliated with the Edinburgh Centre of Robotics, and I was invited due to my performance as Exhibitions Chair at IEEE/RSJ IROS 2016.

- October 2016

  Event. 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Daejeon, Korea (CORE:A, LiveSHINE:A+, MA:A++).
  Role. **Exhibitions Chair**. It is worth mentioning that, also due to my contribution as part of the Organizing Committee, the conference totaled more than 35 exhibitors, which was a record-high at that time for the conference series.

- August 2016

  Event. 25th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), New York, NY, USA (LiveSHINE:A-, MA:A-).
  Role. **Workshops and Tutorials Chair**. It is worth mentioning that this event totaled 17 accepted workshop and tutorial proposals, which is a record-high for the conference series.

- August 2015

  Event. 24th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Kobe, Japan (LiveSHINE:A-, MA:A-).
  Role. **EU Program Chair**.

- November 2014

  Event. 12th International Symposium on Distributed Autonomous Robotic Systems (DARS), Daejeon, Korea (LiveSHINE:C, MA:C).
  Role. **EU Program Chair**.

- October 2013

  Event. 10th International Conference on Ubiquitous Robots and Ambient Intelligence (URAI), Jeju, Korea.
  Role. **Program co-Chair**.

- August 2013

  Event. 22nd IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Gyeonju, Korea (LiveSHINE:A-, MA:A-).
  Role. **EU Program Chair**.

- August 2012

  Event. 8th IEEE International Conference on Automation Science and Engineering (CASE), Seoul, Korea (LiveSHINE:C).
  Role. **Information and Automation co-Chair**.

Organization of international workshops and PhD schools

- September 2026

  Event. Workshop on "Cognitive Robotics: the old and the new", co-located with ICDL 2026, Kyoto, Japan.
  Role. **Co-Organizer**.

- October 2023

  Event. Tutorial on "RICO-MR un framework open source per l'utilizzo della realtà aumentata per l'interazione uomo-robot", co-located with I-RIM 3D, Rome, Italy.
  Role. **Co-Organizer**.

- September 2020

  Event. Workshop on "THUMB: Active haptic humans and robots – artificial haptic systems", co-located with EuroHaptics 2020, Leiden, The Netherlands.
  Role. **Co-Organizer**.

- September 2020

  Event. Workshop on "HOBI: hand-object interaction: from human demonstrations to robot manipulation", co-located with IEEE RO-MAN 2020, anywhere on Earth.
  Role. **Co-Organizer**.

- July 2020[23]

  Event. The 8th International Summer School of Neuroengineering on "Artificial and augmented sensing for humans and humanoids", Genoa, Italy[24].
  Role. **Co-Organizer**. In the context of the School, and for the first time from its beginning, my involvement led to the introduction of more Robotics-oriented topics, specifically in so far as robot perception is concerned in the context of tactile and haptic sensing.

- May 2018

  Event. Workshop on "WORKMATE: the workplace is better with intelligent, collaborative, robot mates", co-located with IEEE ICRA 2018, Brisbane, Australia.
  Role. **Co-Organizer**.

- July 2017

  Event. Workshop on "Towards a next generation of wearable robotic devices for human-oriented assistance and therapy", co-located with IEEE ICORR 2017, London, UK.
  Role. **Co-Organizer**.

- August 2015

[23] Due to the outbreak of COVID-19, the school has been postponed to July 2022.
[24] Web: https://www.neuroengineering.eu/.

Event. Workshop on "MemX: Memory-inspired Robot Architectures for Human-Robot Interaction", co-located with IEEE RO-MAN 2015, Kobe, Japan.
Role. **Co-Organizer**.

- October 2012

  Event. Second Workshop on "Advanced in Tactile Sensing and Touch-based Human-Robot Interaction", co-located with IEEE IROS 2012, Vilamoura, Portugal.
  Role. **Co-Organizer**.

- March 2012

  Event. First Workshop on "Advanced in Tactile Sensing and Touch-based Human-Robot Interaction", co-located with HRI 2012, Boston, MA, USA.
  Role. **Co-Organizer**.

- February 2012

  Event. Workshop "The ROBOSKIN Project: Results and Future Challenges", co-located with CogSys 2012, Vienna, Austria.
  Role. **Co-Organizer**.

Participation to the Editorial Board of international conferences

- I served as **reviewer** for many international journals. Among them: ACM Computing Surveys (Q1 in Computer Science – miscellaneous, Q1 in Theoretical computer science); IEEE Transactions on Affective Computing (Q1 in Human-Computer Interaction, Q1 in Software); IEEE Transactions on Automation Science and Engineering (Q1 in Control and Systems Engineering); IEEE Transactions on Robotics (Q1 in Computer Science Applications, Q1 in Control and Systems Engineering); IEEE Transactions on System, Man and Cybernetics (discontinued in 2015 – Q1 in Computer Science Applications, Q1 in Control and Systems Engineering, Q1 in Human-Computer Interaction; Q1 in Information Systems, Q1 in Software); IEEE Robotics and Automation Letters (Q1 in Artificial Intelligence, Q1 in Computer Science Applications; Q1 in Computer Vision and Pattern Recognition, Q1 in Human-Computer Interaction); IEEE Transactions on Cognitive and Developmental Systems (Q1 in Artificial Intelligence, Q1 in Software); Information Sciences (Q1 in Artificial Intelligence, Q1 in Computer Science Applications, Q1 in Control and Systems Engineering, Q1 in Software, Q1 in Theoretical Computer Science); Intelligent Service Robotics (Q1 in Engineering – miscellaneous, Q2 in Artificial Intelligence); Nature Machine Intelligence (Q1 in Artificial Intelligence, Q1 in Computer Science Applications); PLOS One (Q1 in Multidisciplinary); Robotics and Autonomous Systems (Q1 in Computer Science Applications, Q1 in Control and Systems Engineering, Q1 in Software); Science Robotics (Q1 in Artificial Intelligence, Q1 in Computer Science Applications); Topics in Cognitive Science (Q1 in Artificial Intelligence, Q1 in Human-Computer Interaction).
- **Associate Editor** / **Member** of the Program Committee for international conferences. Among them: AAAI 2016–2022 (CORE:A++, LiveSHINE: A++, MA:A++); CHI 2020 (CORE:A++, LiveSHINE:A++, MA:A++); HAI 2014, 2018 (CORE:B); ICOST 2009–2019 (CORE:C, MA:C); IEEE ICRA 2012–2026 (CORE:B, LiveSHINE:A++, MA:A++); IEEE RO-MAN 2011–2025 (LiveSHINE:A-, MA:A-); IEEE/RSJ IROS 2011–2013, 2017–2025 (CORE:A, LiveSHINE:A+, MA:A++); IJCAI 2017–2021 (CORE:A++, LiveSHINE:A++, MA:A++); Intelligent Environments 2009–2014 (CORE:B, LiveSHINE:C, MA:C); Robotics: Science and Systems 2016–2018 (LiveSHINE:A, MA:A+).

EDUCATION ACTIVITIES

Participation to funded research projects in education

2024 – present. PATH. **Local Coordinator**, Erasmus+, 0.2 M€ overall.

- November 2024 – *present*

  Project. Personalised AI tool for ethical career guidance – a path to follow (PATH).

Role. **Principal Investigator**.
Funding. Erasmus+ KA220, **0.2** M€.
PATH develops an ethical AI-powered career guidance prototype and methodological framework, crafting personalised and data-driven guidance resources that support students and academic communities in navigating academic pathways and professional opportunities aligned with their skills, values, and aspirations.

- November 2023 – *present*

  Project. Ulysseus European University 2.0 (Ulysseus 2.0).
  Role. **Innovation Hub Coordinator**.
  Funding. Erasmus European Universities, **11.2** M€.
  Ulysseus 2.0 is the follow-up of the European University Alliance flagship project Ulysseus. With respect to Ulysseus, the Consortium includes the University of Münster and the University of Montenegro. Furthermore, Ulysseus 2.0 has established a structured partnership with Da Nang University in Vietnam. Whilst in Ulysseus the role of the University of Genoa was focused on activities related to cultural heritage and tourism, the role in Ulysseus 2.0 (on my suggestion) is related to robotics and artificial intelligence, also to align the objectives with other initiatives led by the University of Genoa.

- September 2022 – *present*

  Project. Capacity Building in Robotics and Autonomous Systems in India (IRAS-HUB).
  Role. **Local Coordinator**.
  Funding. Erasmus+ Capacity Building, **900** k€.
  The project aims to establish three hubs in robotics in India, with the aim of overcoming the sparsity of skilled talent in robotics technology in the country. The hubs will be equipped with prototyping equipment and robotics software and will train researchers from Indian HEIs with experts from the EU. Our specific task is related to the definition and organization of study curricula and labs.

- 2019 – *present*

  Project. Japan-Europe Master on Advanced Robotics (JEMARO).
  Role. **Local Coordinator**.
  Funding. Erasmus+, **1.7** M€.
  JEMARO is a follow-up of EMARO+, where the various double degree agreements are extended to Keio University in Japan. The project leads to a syllabus agreed among European partners and Keio University. JEMARO implements a novel study program and exchange scheme between Europe and Japan. It requires a rigorous investigation of how to map ECTS credits to Japanese credits. JEMARO funds 64 2-year scholarships for European and Japanese students, as well as self-funded students.

- 2020 – 2023

  Project. Ulysseus European University (Ulysseus).
  Role. **Local Coordinator**, appointed by the Rector of the University of Genoa as per my term as Deputy Rector for International Affairs.
  Funding. Erasmus European Universities, **4.9** M€.
  Ulysseus is one of the recently established European University Alliances. The Consortium includes Universidad de Seville (Coordinator), Haaga-Helia University of Applied Sciences, MCI Innsbruck, University of Genoa, Tuke University, Université Cote d'Azur, plus more than 80 associated partners. The project led to an increased synergy among the universities in terms of joint study programs, research activities, technology transfer (via the establishment of partner-based innovation hubs), documentation flows, technology platforms, and more in general to a proposal about future European universities.

- 2015 – 2019

  Project. European Master on Advanced Robotics Plus (EMARO+).
  Roles. **Key Person**, **vice-Local Coordinator** from 2014, and **Local Coordinator** from February 2019.
  Funding. Erasmus Mundus, **1.8** M€.
  The English-language MSc in Robotics Engineering is active from 2015 and is the local track of EMARO+, which has been funded twice by the European Commission using the Erasmus Mundus and the Erasmus+ program. The Consortium is made up by Ecole Centrale de Nantes (Coordinator), University of Genova, Warsaw University of Technology, Universität Jaume-I, plus Shanghai Jiao Tong University and Keio

University as associated partners. EMARO+ delivers a double degree syllabus which is still active beyond Erasmus Mundus funding. EMARO+ is still active as a series of double degree agreements.

Supervision of students

- 2012 – *present*. 22 PhD students co-supervised or under supervision.
- 2012 – *present*. More than 90 MSc students supervised or under supervision (also in co-tutelle with French, Polish, Spanish, German, Chinese, and Japanese institutions).

Undergraduate, graduate, and post-graduate courses[25]

- 2025 – *present*

  Course. **Computer Architectures**.
  Credits. 4 ECTS credits.
  Language. English.
  Program. BSc in Computer Engineering, University of Genoa, Italy.

- 2024 – *present*

  Course. **Medical Robotics**.
  Credits. 1 ECTS credit.
  Language. English.
  Program. IANUA School for Advanced Studies, part of the Medical Technologies and Digital Health program, University of Genoa, Italy.

- 2023 – *present*

  Course. **Cognitive Architectures for Robotics**.
  Credits. 5 ECTS credits.
  Language. English.
  Program. MSc in Robotics Engineering, part of the European Master on Advanced Robotics Plus (EMARO+), and the Japan-Europe Master on Advanced Robotics (JEMARO), University of Genoa, Italy.

- 2020 – *present*

  Course. **Artificial Intelligence for Robotics II**.
  Credits. 3 out of 5 ECTS credits.
  Language. English.
  Program. MSc in Robotics Engineering, part of the European Master on Advanced Robotics Plus (EMARO+), and the Japan-Europe Master on Advanced Robotics (JEMARO), University of Genoa, Italy.
  Students. Approximately 55 students in 2022-23.

- 2020 – *present*

  Course. **Ambient Intelligence**.
  Credits. 2 out of 4 ECTS credits.
  Language. English.
  Program. MSc in Robotics Engineering, part of the European Master on Advanced Robotics Plus (EMARO+), and the Japan-Europe Master on Advanced Robotics (JEMARO), University of Genoa, Italy.
  Students. Approximately 35 students in 2022-23.

- 2019 – *present*

  Course. **Informatica per l'Ingegneria Industriale**.
  Credits. 3 out of 6 ECTS credits.
  Language. Italian.
  Program. BSc in Mechanical Engineering, University of Genoa, Italy.
  Students. Approximately 170 students in 2022-23.

[25] When reporting the feedback, I considered the last Academic Year. Positive feedback originates from the sum of two feedback classes, namely "Positive" and "Almost positive".

- 2014 – *present*

  Course. **Software Architectures for Robotics**.
  Credits. 3 out of 5 ECTS credits.
  Language. English.
  Program. Master Robotique Avancée, part of the European Master on Advanced Robotics Plus (EMARO+), Ecole Centrale de Nantes, France.
  Students. Approximately 44 students in 2022-23.

- 2017 – 2020

  Course. **Social Robotics**.
  Credits. 2 out of 4 ECTS credits.
  Language. English.
  Program. MSc in Robotics Engineering, part of the European Master on Advanced Robotics Plus (EMARO+).
  Students. Approximately 35 students in 2019-20.

- 2015 – 2021

  Course. **Fondamenti di Informatica**.
  Credits. 5 out of 9 ECTS credits.
  Language. Italian.
  Program. BSc in Computer Engineering, University of Genoa, Italy.
  Students. Approximately 125 students in 2020-21.

- 2012 – 2015

  Course. **Fondamenti di Informatica**.
  Credits. 12 ECTS credits.
  Language. Italian.
  Program. BSc in Computer Engineering, University of Genoa, Italy.
  Students. Approximately 130 students in 2014-15.

- 2009 – 2023

  Course. **Software Architectures for Robotics**.
  Credits. 5 ECTS credits.
  Language. English.
  Program. MSc in Robotics Engineering, part of the European Master on Advanced Robotics Plus (EMARO+), and the Japan-Europe Master on Advanced Robotics (JEMARO), University of Genoa, Italy.
  Students. Approximately 80 students in 2022-23.

RESEARCH ACTIVITIES

Participation to funded research projects in research

- 2024 – *present*

  Project. CONCERTO.
  Role. **Key Person**.
  Funding. Italian Ministry for University and Research, PRIN funding scheme, **0.4** M€.
  Description. CONCERTO aims at designing and developing advanced human-robot collaboration techniques based on Vision-Language-Action models and Reinforcement Learning. The goal is to investigate ways to encode advanced robot behaviors within modular and distributed cognitive architectures for robots.

- 2024 – *present*

  Project. SENSE-NN.
  Role. **Principal Investigator**.
  Funding. Leonardo SpA, Solvers Wanted program, **30** k€.

Description. This small project is aimed at modelling a neuromorphic sensory and control architecture using Large Language Models as a substrate. Neuromorphic architectures are characterized by a few limitations when it comes to their use in object tracking tasks, most notably, the need to define a "state" to be used as the set of parameters to control to achieve a given objective. The project explores the use of generative artificial intelligence approaches to overcome these limitations. *Our role* is related to the modelling of spike trains and Bayesian estimation processes using Large Language Models.

- 2022 – *present*

  Project. Dheal-com.
  Role. **Key Person**.
  Funding. Italian Ministry for University and Education, PNRR – "Complementare" funding scheme, approximately **78** M€.
  Description. The project aims at addressing the use of a broad range of assistive technologies to support fragile populations, for example elderly and people with special needs. *My role* will be supervising the activities of a specific task, that is, designing and developing open-source solutions to monitor the activities of daily living. In particular, the activities will be related to: IoT-based early detection of disease symptoms using artificial intelligence techniques, evaluation of impairment, frailty, and disease progression in different age groups; embodied artificial intelligence platforms enriched with cognitive capabilities to assist people suffering from chronic conditions; co-adaptive human-robot interfaces and advanced interaction control strategies; technologies providing people with sensorimotor impairments with access and control of assistive devices and robots.

- 2022 – *present*

  Project. Fit4MedRob.
  Role. **Key Person (resp. for Deliverable 9.2)**.
  Funding. Italian Ministry for University and Education, PNRR – "Complementare" funding scheme, approximately **128** M€.
  Description. The project aims at addressing clinical and technological challenges related to rehabilitation and personal care of people with reduced or even absent sensory, motor, or cognitive functions due to injuries or congenital reasons. This will be done by designing, developing, and testing intelligent robots and smart environments able to interact with people cognitively and physically. In a future perspective, the project aims at preparing for the next generation of healthcare and personal care robots by promoting the investigation of new hypotheses and ideas, as well as technologies, to allow robots to operate intelligently and proactively while interacting with humans. *My role* is related to the supervision of one specific sub-project (relate to related to human behavior understanding, prediction, and human-robot interaction, involving, besides the University of Genoa, also the Italian Institute of Technology, University of Naples Federico II, and University Campus Bio-medico), and the coordinator of the whole Deliverable 9.2, which is related to 4 sub-projects.

- 2022 – *present*

  Project. RAISE.
  Role. **Principal Investigator (resp. for Milestone 5)**.
  Funding. Italian Ministry for University and Research, PNRR – "Ecosistemi dell'Innovazione" funding scheme, approximately **112** M€.
  Description. RAISE is a project heavily focused on technology transfer, which aims at deploying a wide range of artificial intelligence and robotics related technologies on the Liguria territory. In fact, it has four specialized "spokes", namely related to smart city, digital health, logistics, and ports. However, its focus is on the technology transfer itself, which is assumed to guide the actual deployment of such technology, as part of one specific spoke. *My role* spans both the technology- and the transfer-related activities: I am involved in projects of all spokes (except one), and I am tasked as the responsible for the whole Milestone 5, which is related to technology transfer.

- 2024 – 2026

  Project. DIVER+.
  Role. **Scientific Coordinator**.
  Funding. Regione Liguria, POR FESR, **930** k€.
  Description. The goal of DIVER+ is to design and create a prototype of a novel deep-tech oriented diver suit. The idea is to exploit novel technology in sensing, data processing, artificial intelligence, and data

visualization using AR/XR to provide professional divers with information about their tasks while operating under the sea surface. Besides the overall scientific coordination, *our role* is related to sensing, data processing, and AR/XR visualization.

- 2022 – 2025

  Project. Dynamics and timescales of volcanic plumbing systems: a multidisciplinary approach to a multifaceted problem (DynaVolc).
  Role. **Principal Investigator**.
  Funding. Italian Ministry for University and Research, PRIN funding scheme, **0.9** M€.
  Description. The goal of the project is to apply advanced machine learning algorithms and multi-physics simulators to model and predict to crystallization process occurring within volcanic plumbing systems. These models will allow to study the formation process of rocks and crystals and, as inverse systems, infer the initial conditions which gave rise to such processes based on rocks and crystals observation. *Our role* in the project is to model the involved physical and chemical processes using appropriate physically informed machine learning approaches.

- 2020 – 2021

  Project. MYWAI4ROBOTICS
  Role. **Principal Investigator**.
  Funding. H2020, DIH-HERO cascade funding, **0.3** M€.
  Description. The goal of MYWAI4ROBOTICS was to design new human-robot cooperation interfaces based on human body gestures and voice. The project exploited know-how in ergonomics to develop novel robot interfaces for an easy programming and use of collaborative robots. It involved the cooperation with the companies Knowhedge SRL[26], Zenatek SpA[27], and Seristudio SpA[28]. *Our role* was related to the design of the algorithms to model and recognize body gestures, as well as to the voice-based interface.

- 2019 – 2022

  Project. Robot In-hand Dexterous manipulation by extracting data from human manipulation of objects to improve robot autonomy and dexterity (InDex).
  Role. **Principal Investigator**.
  Funding. H2020, CHIST-ERA, **1.1** M€.
  Description. InDex aimed at teaching robot policies for in-hand robot manipulation starting from human demonstrations. In the project, *our role* was to provide expertise in data acquisition and collection, machine and reinforcement learning, tactile-based robot control.

- 2018 – 2021

  Project. Artificial Somatosensation for Humans and Humanoids (ASH^2).
  Role. **Key Person**.
  Funding. Ministero per gli Affari Economici e la Cooperazione Internazionale, Israeli Ministry of Science and Technology, **0.2** M€.
  Description. This small project was important because it led to the definition of a joint lab between the University of Genoa and the Ben Gurion University of the Negev in Israel. Beside the scientific work done as part of the project, which was related to the design of solutions for tactile-based smart prostheses, the agreement allowed us to exchange students, as it has been done already in the context of the MSc in Robotics Engineering. *My role* was related to mentoring and supervising the team in matters related to tactile sensing, motion analysis, haptics.

- 2017 – 2019

  Project. Culture-Aware Robots and Environmental Sensor Systems for Elderly Support (CARESSES).
  Role. **Key Person**.
  Funding. H2020, Japanese Ministry of Internal Affairs and Communications, **2.0** M€.

- 2015 – 2017

  Project. Wearable and Ambient Intelligence make assistive robots smarter (WearAmI).

[26] Web: https://www.knowhedge.com/.
[27] Web: https://www.zenatek.com/.
[28] Web: https://www.seristudio.com/it/.

Role. **Key Person**.
Funding. Ministero per gli Affari Economici e la Cooperazione Internazionale, Swedish Research Council, **0.1** M€.

- 2013 – 2015

  Project. Cloth Perception and Manipulation (CloPeMa).
  Role. **Key Person**.
  Funding. FP7, **1.7** M€.

- 2011 – 2014

  Project. A Secure Habitat for an Enhanced Long Life (SHELL).
  Role. **Scientific Coordinator**.
  Funding. Italian Ministry of Economic Development, Made in Italy – Industria 2015, 1**.0** M€.
  Description. The promising results of this industrial project induced us to fund the startup Teseo srl, spin-off company from the University of Genoa. Besides coordinating the whole project, *my role* was also to supervise the team at the University of Genoa responsible for knowledge representation and reasoning.

- 2009 – 2012

  Project. Skin-based technologies and capabilities for safe, autonomous, and interactive robots (ROBOSKIN).
  Role. **Management Coordinator**.
  Funding. FP7, **3.1** M€.
  Description. In ROBOSKIN, principled design techniques for large-scale tactile sensors for robots have been proposed and discussed in the scientific literature for the first time. The results of the project have led to the development of tactile sensors used also in well-known humanoid robots, including the iCub robot from the Italian Institute of Technology[29]. Beside the role of Management Coordinator, I personally supervised the team at the University of Genoa in hardware design and development, firmware design and development, real-time data acquisition and robot control, tactile data representation, and tactile data processing.

Key cooperations with universities and research institutions

In the context of all the cooperation activities below, my role is related to the strategic definition of joint research activities, research supervision, and group mentoring.

- *Italian Institute of Technology*[30]

  Contacts: Dr. Arash Ajoudani, Prof. Giulio Sandini, Dr. Alessandra Sciutti, Dr. Claudio Semini.
  Key topics: **human-robot interaction**; **humanoid robotics**; **cognitive architectures**. With Dr. Ajoudani (twice ERC grantee) we are developing cognitive models for human-robot collaboration based on ergonomic principles. The cooperation is based on joint research carried out as part of MSc theses. With Prof. Giulio Sandini we are cooperating on the next generation iCub cognitive architecture (iCog), and in particular my role is related to the design of the cognitive architecture and the use of suitable reasoning techniques based on embodied AI principles. With Dr. Sciutti (ERC grantee), we are interested in exploring human motion models with the aim of generating expressive robot motions for human-robot interaction purposes. With Dr. Claudio Semini we are exploring the integration of advanced AI techniques to enhance the autonomy of planetary rovers. These collaborations led to a 3-year affiliation to the institute.

- *Japan Advanced Institute of Science and Technology*[31]

  Contacts: Prof. Nak Young Chong, Prof. Ahn Van Ho.
  Key topics: **behavior-based robot architectures**; **human-robot interaction; embodiment and morphology**. With Prof. Chong, we are exploring the design and development of various models to mimic human memory in robots, specifically aimed at a better human-robot interaction process. The emphasis is

[29] Web: https://www.iit.it/research/lines/icub.
[30] Web: https://www.iit.it/.
[31] Web: https://www.jaist.ac.jp/english/.

on computational aspects. With Prof. Van Ho, we are investigating the use of novel, large-scale tactile sensors to improve physical aspects of human-robot collaboration, and the general role of embodiment and morphology. We are interested into pursuing two strands of activities: one is related to the processing of tactile data, the other to the integration of information extracted from contact phenomena to drive robot intelligent behaviors.

- *Technical University Wien*[32]
  Contacts: Prof. Markus Vincze.
  Key topics: **robot manipulation**; **reinforcement learning**. In the context of the H2020 CHIST-ERA project InDex, now completed, we developed methods and algorithms to derive policies to execute data-induced manipulation strategies. More recently, we have explored together cognitive approaches to carry out the next-best-view selection of objects to determine more accurate object representations.

- *University of Huddersfield*[33]
  Contact: Prof. Mauro Vallati.
  Key topics: **planning**; **reasoning; generative artificial intelligence**. Together with Prof. Vallati, we are interested in exploring how to integrate advanced reasoning techniques inside hybrid reactive-deliberative robot frameworks. On the one hand, this requires investigating the interplay between sensing, perception, and the representation of data; on the other hand, addressing issues related to task-motion planning, specifically in scenarios where the robot must interact with the environment and people and objects therein.
- *University of Oxford*[34]
  Contact: Prof. Perla Maiolino.
  Key topics: **human-robot interaction; embodiment; morphology**. With Prof. Maiolino we are exploring how embodiment insights and morphological computation can lead to more versatile robot behaviors.

TECHNOLOGY TRANSFER

Startups I co-founded

- *Teseo srl, Italy, a spin-off company from the University of Genoa*[35]
  Role: **Founder**, **Partner**, **Chief Research Officer**.
  Key topics: **wearable sensing**; **human activity recognition in healthcare**; **machine learning**; **knowledge representation**; **virtual assistants**; **internet of things**; **blockchain**. The startup, which I co-founded in 2016, employs now 6 people and released its first product, Kibi, a smart virtual assistant able to assist elderly and people with special needs in their daily activities. The solution is protected by one international patent and one national patent (with pending international extension). Teseo, which has raised 1.6 M€ so far, has been selected for acceleration or incubation by different institutions (e.g., Houston Tech Ranch and Accelerate Italy in the United States, PoliHub in Milan, Bio4Dreams in Genoa, AC75 in Ancona), has established a number of cooperation agreements with existing companies and associations (e.g., VillageCare srl, TLab srl, the consortium WeCare, Netalia), has established cooperation agreements with public and private hospitals and care facilities (e.g., Ospedale Galliera in Genoa, Casa di Cura Privata del Policlinico in Milan), and it interacts with important well-established companies. Teseo has been showcased as one of the eleven use cases by the University of Genoa for the good practices in technology transfer in the annual *Valutazione della Qualità della Ricerca* (VQR) submitted to the Ministry of Research and Education in 2021. Apart from the initial work on the first prototype, I contributed to the definition of the company's strategic vision, guidance, interaction with possible investors and stakeholders, accelerators, interested companies, and I periodically hold technical and strategy-oriented meetings. There is a close relationship between the group I coordinate at the University of Genoa TheEngineRoom and Teseo, which is fundamental to continuously translate research results into possible real-world solutions. Such scenarios

[32] Web: https://www.tuwien.at/en/.
[33] Web: http://www.ox.ac.uk/.
[34] Web: http://www.hud.ac.uk/.
[35] Web: https://www.teseo.tech/.

also constitute fundamental use cases to ground research activities at the University of Genoa, which Teseo has contributed with a funding of approximately 0.1 M€ for research positions.

- *Intra-Operative Surgical Research (IOSR) srl, Italy*[36]*, a spin-off company from the University of Genoa*

  Role: **Founder**, **Partner**, **Chief Technical Officer**.
  Key topics: **implantable sensors**, **machine learning**, **internet of things**, **soft tissue modelling**, **augmented reality**. The startup, which I co-founded in 2020 and now exited, aimed at developing novel technologies to improve surgeons' experience during intra-operative contexts, specifically for prostate cancer. The company got its first seed funding round (0.1 M€), and it is negotiating a more substantial funding round. I contributed to the overall definition of the company's strategic vision and the definition of the technical approaches. Also in this case, there are strong connection between the research activities done by TheEngineRoom and IOSR, also in view of the strong link with the School of Medicine at the University of Genoa and with the San Martino Polyclinic Hospital, which granted the company access to a real operating room equipped with a Da Vinci surgical robot. IOSR has been exposed to confrontations with by players in the robot surgical domain, such as Olympus Medical, Medtronic (in particular, the Robotics division in the United States), and Almaviva.

Cooperation with the Industry

In the context of all the cooperation activities below, my role is related to the strategic definition of activities to carry out, their supervision, and group mentoring.

- 2025 – *present time*. Artificial Intelligence Advisor, Fusion AI Labs srl.
- 2024 – 2025. Artificial Intelligence Advisor, Netalia srl.
- 2018 – 2022. Artificial Intelligence Advisor, HIRO srl.

Experience in project proposals evaluation

- 2026 – *present time*. Project evaluator and reviewer for Regione Puglia, Italy.
- 2026 – *present time*. Project evaluator for the Swiss National Foundation, Switzerland.
- 2025 – *present time*. Project evaluator and reviewer for Regione Toscana, Italy.
- 2017 – *present time*. Project evaluator and reviewer for Provincia Autonoma di Trento, Italy.
- 2013 – *present time*. Project evaluator and reviewer for the American Alzheimer Association.
- 2013 – *present time*. Project evaluator and reviewer for the European Commission (H2020, ERC).
- 2009 – 2015. Project evaluator and reviewer for Finanziaria Ligure per lo Sviluppo Economico (FILSE). Evaluated more than 100 project proposals in POR/FESR 2009, 2011 and 2013 (Action 1.2.2 and Action 1.2.3).

HONORS, AWARDS, INVITATIONS

Honors and awards

- 2025. **Best Paper Award Candidate** at the 2025 IEEE International Conference on Development and Learning (ICDL).
- 2021. **Innovation Business Award** Associazione Nazionale Giovani Innovatori 2021.
- 2020. **Best Paper Award Finalist** at the 2020 Human-Friendly Robotics Symposium (HFR).
- 2020 (with Teseo srl). Zcube-OpenZone SUB2020 Special Award.
- 2020 (with Teseo srl). Mentorship Program Admission, PoliHub, Milan, Italy.

[36] Web: https://iosurgical.tech/.

- 2020 (with Teseo srl). Included in the Blockchain Hub Europe program.
- 2019 (with Teseo srl). Exhibition Admission. Web Summit 2019, Lisbon, Portugal.
- 2019 (with Teseo srl). Mentorship Program Admission, Italian Global Startup Program, Austin Tech Ranch, TX, USA.
- 2019 (with Teseo srl). Mentorship Program Admission, Municipality of Genoa, Italy.
- 2019 (with HIRO Robotics srl). Winner, Gruppo Industriali Confindustria Startup Contest, Como, Italy.
- 2018 (with HIRO Robotics srl). Jury Award, NTT Data Open Innovation Contest, Milan, Italy.
- 2018 (with Teseo srl). Finalist, NTT Data Open Innovation Contest, Milan, Italy.
- 2018 (with HIRO Robotics srl). Second ranked, Best Practices for Innovation Confindustria Context, Salerno, Italy.
- 2018 (with Teseo srl). Finalist, Best Practices for Innovation Confindustria Context, Salerno, Italy.
- 2018 (with HIRO Robotics). Best Industrial Startup, SMARTcup Award by Finanziaria Ligure per lo Sviluppo Economico (FILSE), Genoa, Italy.
- 2018 (with Teseo srl). Janssen Award for the Best Startup, Biopharma and Assotech, Milan, Italy.
- 2015 (with Teseo srl). SMART&START Italy grant, Italian Ministry of Economic Development.
- 2015 (with Teseo srl). Second ranked, SMARTcup Award by Finanziaria Ligure per lo Sviluppo Economico (FILSE), Genoa, Italy.
- 2015. Erasmus/LLP Scholarship for teaching activities at Ecole Centrale de Nantes, France.
- 2014. Excellence in Reviewing, Elsevier.
- 2013. Erasmus/LLP Scholarship for teaching activities at Ecole Centrale de Nantes, France
- 2013. Erasmus Mundus EACEA Scholarship to visit Keio University, Tokyo, Japan.
- 2012. **The 2012 IFSA Award for Young Scientist** at the 2012 Symposium on Advanced in Artificial Intelligence and Applications (FedCSIS 2012).
- 2012. Erasmus Mundus EACEA Scholarship to visit Shanghai Jiao Tong University, Shanghai, China.
- 2011. Erasmus Mundus EACEA Scholarship to visit Asian Institute of Technology, Bangkok, Thailand.
- 2010. **Best Paper Award** at the 2010 IEEE International Symposium on Robot and Human Interactive Communication (IEEE RO-MAN 2010).
- 2008. **Invited paper** at the 2008 IEEE International Conference on Universal Communication (ISUC 2008).
- 2008. **Best Paper Award** at the 2008 International Conference on Distributed Autonomous Robotic Systems (DARS 2008).

Invited talks

- 2025. Shonan Meeting on “Cognitive Robotics”, Japan.
- 2025. I-RIM 3D, Rome, Italy.
- 2024. The past, the present, and the future of Robotics, Karlsruhe Institute of Technology, Germany.
- 2024. SFSCON, Bolzano, Italy.
- 2023. COMPASS Webinar on Robotics, Anywhere on Earth.
- 2022. SophIA Summit 2022, Nice, France.
- 2022. MeetInItaly4LifeScience, Genoa, Italy.
- 2022. Festival della Comunicazione, Santa Margherita Ligure, Italy.
- 2021. Ocean Race Europe, Genoa, Italy.
- 2021. Robotics in Italy. Ambasciata di Italia in Zagreb, Croatia.
- 2020. C1A0 Expo: Artificial Intelligence for Changing the Planet, Genoa, Italy.

- 2020. TechShareDays, Anywhere on Earth.
- 2019. Fourth World Congress on Robotics, Shenyang, China.
- 2019. Shanghai Polytechnic University, Shanghai, China.
- 2018. Conference "Assemblaggio 4.0 e robotica collaborativa", Milan, Italy.
- 2018. University of Perugia, Perugia, Italy.
- 2017. IEEE RO-MAN 2017 Workshop on "Artificial perception, machine learning and datasets for human-robot interaction", Lisbon, Portugal.
- 2017. IEEE RO-MAN 2017 Workshop on "Towards intelligent social robots: social cognitive systems in smart environments", Lisbon, Portugal.
- 2017. Summer School jointly held with the Eight Italian Ambient Assisted Living Forum (ForItAAL 2017), Genoa, Italy.
- 2016. IEEE RO-MAN 2016 Workshop on Human-oriented Approaches for Assistive and Rehabilitation Robotics, New York, NY, USA
- 2016. ICAPS 2016 Workshop on Planning, Scheduling and Dependability in Safe Human-Robot Interactions, London, UK.
- 2015. STIFF-FLOP Autumn School on Soft and Flexible Surgical Robotics, Turin, Italy.
- 2012. The 2012 ROSEC International Summer Workshop, Seoul, South Korea.

PUBLICATIONS LIST (2003-2026)

Edited Books

B2. F. Mastrogiovanni and F. Amigoni (Eds.). Intelligent Autonomous Systems 19. Springer Nature Switzerland AG, 2026.

B1. F. Mastrogiovanni and N. Y. Chong (Eds.). Handbook of research on Ambient Intelligence and smart environments: Trends and Perspectives. IGI Global, Hershey, PA. August 2011.

Editorials

E5. P. Beckerle, G. Salvietti, R. Unal, F. Mastrogiovanni. Human-oriented approaches for assistive and rehabilitation robotics – engineering methods, technical implementation, and treatment. Robotics and Autonomous Systems, volume 96, pages 238-241, October 2017.

E4. W. Sheng, Y. Matsuoka, Y. Ou, M. Liu, F. Mastrogiovanni. Special section on home automation: a human-centered perspective. IEEE Transactions on Automation Science and Engineering, volume 12, number 4, pages 1155-1156, October 2015.

E3. F. Mastrogiovanni, L. Natale, G. Cannata, G. Metta. Special issue on advances in tactile sensing and tactile-based human-robot interaction. Robotics and Autonomous Systems, volume 63, pages 227-229, January 2015.

E2. F. Mastrogiovanni and N.Y. Chong. The need for a research agenda in intelligent Robotics. Intelligent Service Robotics, volume 6, number 1, pages 1-3, April 2013.

E1. F. Mastrogiovanni and N.Y. Chong. Old problems are still there: robot intelligence as the interplay between many components of complex architectures. Intelligent Service Robotics, volume 5, number 4, pages 211-212, December 2012.

Journals[37]

J71. S. Macciò, A. Carfì, A. Capitanelli, P. Tropea, M. Corbo, F. Mastrogiovanni, M. Picardi. IFRA: a machine learning based instrumental fall risk assessment. Healthcare, volume 14, number 2, 228, January 2026.

J70. M. Koolani, S. Bamford, P. Trunin, M. Lo Preti, F. Mastrogiovanni, L. Beccai, C. Bartolozzi. An event-based opto-tactile skin. Frontiers in Neuroscience, volume 19, 1735068, January 2026.

J69. A. Thomas, F. Mastrogiovanni, M. Baglietto. Locally optimal solutions to constraint displacement problems via path-obstacle overlaps. Robotics and Autonomous Systems, volume 196, 105251, January 2026. **Q1** in Computer Science Applications, **Q1** in Software.

J68. V. Belcamino, M.N.L. Dinh, Q. Luu, A. Carfì, A. Van Ho, F. Mastrogiovanni. A distributed multi-modal sensing approach for human activity recognition in real-time human-robot interaction. IEEE Robotics and Automation Letters, volume 10, number 10, 10011 – 10018, October 2025. **Q1** in Artificial Intelligence, **Q1** in Computer Science Applications, **Q1** in Computer Vision and Pattern Recognition, **Q1** in Human-Computer Interaction.

J67. A. Musu, V. Parodi, M. Toplak, A. Carfì, M. Ágreda-Lopez, F. Mastrogiovanni, J. Zhang Zhou, D. Perugini, D. Belmonte, P. E. Wieser, B. Zupan. M. Petrelli. Orange-Volcanoes: a new open and collaborative platform to perform data-driven investigations and machine learning analyses in petrology and volcanology. Applied Computing and Geosciences, volume 27, 100270, September 2025. **Q1** in Computer Science (miscellaneous).

J66. H. Karami, A. Thomas, F. Mastrogiovanni. A task and motion planning framework using iteratively deepened AND/OR graphs. Robotics and Autonomous Systems, volume 189, 104943, July 2025. **Q1** in Computer Science Applications, **Q1** in Software.

J65. K. Wu, Z. Wang, X. Yang, Y. Chen, F. Mastrogiovanni, J. Zhang, l. Liu. TransMA: an explainable multi-modal deep learning model for predicting properties of ionizable lipid nanoparticles in mRNA delivery. Briefings in Bioinformatics, volume 26, number 3, bbaf307, March 2025. **Q1** in Information Systems.

J64. A. Bulanti, A. Carfì, P. Traverso, C. Terrone, F. Mastrogiovanni. A novel method to compute the contact surface area between an organ and cancer tissue. Journal of Imaging, volume 11, number 3, 78, March 2025. **Q1** in Computer Graphics and Computer-Aided Design, Q2 in Computer Vision and Pattern Recognition.

J63. P. Traverso, A. Carfì, A. Bulanti, M. Fabbi, V. Giasotto, M. Mattiauda, L. Lo Monaco, S. Tappero, G. Guano, F. Balzarini, M. Borghesi, F. Mastrogiovanni, C. Terrone. Innovative 3D method predicts surgery outcomes by calculating real contact surface of renal tumor. Urologic Oncology: Seminars and Original Investigations, volume 43, number 3, 192.e11 – 192.e19, March 2025.

J62. M. Ágreda-Lopez, V. Parodi, A. Musu, C. Jorgenson, A. Carfì, F. Mastrogiovanni, L. Caricchi, D. Perugini, M. Petrelli. Enhancing machine learning thermobarometry for clinopyroxene-bearing magmas. Computers & Geosciences, volume 193, 105707, November 2024. **Q1** in Information Systems.

J61. A. Iannone, A. Carfì, F. Mastrogiovanni, R. Zaccaria, C. Manna. On the role of artificial intelligence in analysing oocytes during in vitro fertilization procedures. Artificial Intelligence in Medicine, volume 157, 102997, November 2024. **Q1** in Artificial Intelligence.

J60. E. S. Barjuei, A. Capitanelli, R. Bertolucci, E. Courteille, F. Mastrogiovanni, M. Maratea. Digital workflow for printability and prefabrication checking in robotic construction 3D printing based on artificial intelligence planning. Engineering Applications of Artificial Intelligence, volume 133, part C, 108254, July 2024. **Q1** in Artificial Intelligence.

J59. A. Capitanelli, F. Mastrogiovanni. A framework for neurosymbolic planning using large language models. Frontiers in Neurorobotics, volume 18, 1342786, June 2024. Q2 in Artificial Intelligence.

[37] Quartiles have been determined using Scimago Journal Rank (web: https://www.scimagojr.com), with reference to 2024 or the latest available year. The considered subject area is “Computer Science”.

J58. V. Belcamino, A. Carfì, F. Mastrogiovanni. A systematic review on custom data gloves. IEEE Transactions on Human-Machine Systems, volume 54, number 5, 520 – 535, June 2024. **Q1** in Artificial Intelligence, **Q1** in Computer Networks and Communications, **Q1** in Computer Science Applications, **Q1** in Human-Computer Interaction, **Q1** in Signal Processing.

J57. L. Lastrico, V. Belcamino, A. Carfì, A. Vignolo, F. Mastrogiovanni, A. Sciutti, F. Rea. The effects of selected object features on a pick-and-place task: a human multimodal dataset. International Journal of Robotics Research, volume 43, number 1, October 2023. **Q1** in Artificial Intelligence, **Q1** in Software.

J56. L. Seminara, S. Dosen, F. Mastrogiovanni, M. Bianchi, S. Watt, P. Beckerle, T. Nanayakkara, K. Drewing, A. Moscatelli, R.L. Klatzky, G.E. Loeb. A hierarchical sensorimotor control framework for human-in-the-loop robotic hands. Science Robotics, volume 8, number 78, May 2023. **Q1** in Artificial Intelligence, **Q1** in Computer Science Applications.

J55. E. Merlo, E. Lamon, F. Fusaro, M. Lorenzini, A. Carfì, F. Mastrogiovanni, A. Ajoudani. An ergonomic role allocation framework for dynamic human-robot collaborative tasks. Journal of Manufacturing Systems, volume 67, May 2023. **Q1** in Hardware and Architecture, **Q1** in Software.

J54. A. Carfì, F. Mastrogiovanni. Gesture-based human-machine interaction: taxonomy, problem definition, and analysis. IEEE Transactions on Cybernetics, volume 53, number 1, January 2023. **Q1** in Computer Science Applications, **Q1** in Human-Computer Interaction, **Q1** in Information Systems, **Q1** in Software.

J53. F. Balzarini, P. Traverso, A. Carfì, S. Macciò, V. Giasotto, A. Caviglia, F. Chierigo, G. Guano, M. Borghesi, F. Mastrogiovanni, C. Terrone. A new method to calculate renal tumor contact surface area with better predictive power of warm ischemia time in nephron sparing surgery. European Urology Open Science, volume 44, October 2022.

J52. A. Thomas, F. Mastrogiovanni, M. Baglietto. Safe motion planning with environment uncertainty. Robotics and Autonomous Systems, volume 156, 104203, October 2022. **Q1** in Computer Science Applications, **Q1** in Software.

J51. L. Buoncompagni, K.Y. Syed, F. Mastrogiovanni. Human activity recognition models in ontology networks. IEEE Transactions on Cybernetics, volume 52, number 6, June 2022. **Q1** in Computer Science Applications, **Q1** in Human-Computer Interaction, **Q1** in Information Systems, **Q1** in Software.

J50. S. Wang, A. Albini, P. Maiolino, F. Mastrogiovanni, G. Cannata. Fabric classification using a finger-shaped tactile sensor via robotic sliding. Frontiers in Neurorobotics, volume 16, 808222, February 2022. Q2 in Artificial Intelligence.

J49. L. Buoncompagni, K.Y. Syed, F. Mastrogiovanni. OWLOOP: a modular API to describe OWL axioms in OOP object hierarchies. SoftwareX, volume 17, January 2022. Q3 in Computer Science Applications, Q3 in Software.

J48. A. Thomas, F. Mastrogiovanni, M. Baglietto. Exact and bounded collision probability for motion planning under Gaussian uncertainty. IEEE Robotics and Automation Letters, volume 7, number 1, January 2022. **Q1** in Artificial Intelligence, **Q1** in Computer Science Applications, **Q1** in Computer Vision and Pattern Recognition, **Q1** in Human-Computer Interaction.

J47. A. Carfì, T. Patten, Y. Kuang, A. Hammoud, M. Alameh, E. Maiettini, A.I. Weinberg, D. Faria, F. Mastrogiovanni, G. Alenya, L. Natale, V. Perdereau, M. Vincze, A. Billard. Hand-object interaction: from human demonstration to robot manipulation. Frontiers in Robotics and AI, volume 8, 714023, October 2021. Q2 in Artificial Intelligence, Q2 in Computer Science Applications.

J46. A. Thomas, F. Mastrogiovanni, M. Baglietto. MPTP: Motion-planning-aware task planning for navigation in belief space. Robotics and Autonomous Systems, volume 141, 103786, July 2021. **Q1** in Computer Science Applications, **Q1** in Software.

J45. R. Bertolucci, A. Capitanelli, C. Dodaro, N. Leone, M. Maratea, F. Mastrogiovanni, M. Vallati. Manipulation of articulated objects using dual-arm robots via Answer Set Programming. Theory and Practice of Logic Programming, volume 21, number 3, pages 372-401, May 2021. Q2 in Artificial Intelligence, Q2 in Computational Theory and Mathematics, Q2 in Hardware and Architecture, Q2 in Software.

J44. K. Darvish, E. Simetti, F. Mastrogiovanni, G. Casalino. A hierarchical architecture for human-robot cooperation processes. IEEE Transactions on Robotics, volume 37, number 2, pages 567-586, April 2021. **Q1** in Computer Science Applications.

J43. A. Thomas, F. Mastrogiovanni, M. Baglietto. An integrated localization, motion planning, and obstacle avoidance algorithm in belief space. Intelligent Service Robotics, volume 14, pages 235-250, March 2021. Q2 in Artificial Intelligence.

J42. E. Coronado, D. Deuff, P. Carreno-Medrano, L. Tian, D. Kulic, S. Sumartojo, F. Mastrogiovanni, G. Venture. Towards a modular and distributed end-user development framework for human-robot interaction. IEEE Access, volume 9, pages 12675-12692, January 2021. **Q1** in Computer Science (miscellaneous).

J41. M. Ruzzon, A. Carfì, T. Ishikawa, F. Mastrogiovanni, T. Murakami. A multi-sensory dataset for the activity of daily living. Data in Brief, volume 30, 106122, October 2020.

J40. P.K. Murali, K. Darvish, F. Mastrogiovanni. Deployment and evaluation of a flexible human-robot collaboration model based on AND/OR graphs in a manufacturing environment. Intelligent Service Robotics, volume 13, pages 439-457, September 2020. Q2 in Artificial Intelligence.

J39. I.S. Mohamed, A. Capitanelli, F. Mastrogiovanni, S. Rovetta, R. Zaccaria. Detection, localisation and tracking of pallets using machine learning techniques and 2D range data. Neural Computing and Applications, volume 32, pages 8811-8828, July 2020. **Q1** in Artificial Intelligence, **Q1** in Software.

J38. E.L. Coronado, F. Mastrogiovanni, B. Indurkhya, G. Venture. Visual programming environments for end-user development of intelligent and social robots: a systematic review. Journal of Computer Languages, volume 58, 100970, June 2020. Q3 in Computer Networks and Communications, Q3 in Human-Computer Interaction, Q3 in Software.

J37. A. Carfì, J. Villalobos, E. Coronado, B. Bruno, F. Mastrogiovanni. Can human-inspired learning behaviour facilitate human-robot interaction? International Journal of Social Robotics, volume 12, issue 1, pages 173-186, January 2020. **Q1** in Computer Science (miscellaneous), **Q1** in Human-Computer Interaction.

J36. L. Seminara, P. Gastaldo, S.J. Wyatt, K.F. Valyear, F. Zuher, F. Mastrogiovanni. Active haptic perception in robots: a review. Frontiers in Neurorobotics, volume 13, pages 53-73, August 2019. Q2 in Artificial Intelligence.

J35. B. Bruno, C.T. Recchiuto, I. Papadopoulos, A. Saffiotti, C. Koulouglioti, R. Menicatti, F. Mastrogiovanni, R. Zaccaria, A. Sgorbissa. Knowledge representation for culturally competent personal robots. International Journal of Social Robotics, volume 11, issue 3, pages 515-538, June 2019. **Q1** in Computer Science (miscellaneous), **Q1** in Human-Computer Interaction.

J34. I.S. Mohamed, A. Capitanelli, F. Mastrogiovanni, S. Rovetta, R. Zaccaria. A 2D laser rangefinder scans dataset of standard EUR pallets. Data in Brief, volume 24, pages 1-9, February 2019.

J33. A. Carfì, F. Foglino, B. Bruno, F. Mastrogiovanni. A multi-sensor dataset for human-human handover. Data in Brief, volume 22, pages 109-117, February 2019.

J32. W. Wasko, A. Albini, P. Maiolino, F. Mastrogiovanni, G. Cannata. Contact modelling and tactile data processing for robot skin. Sensors, volume 19, issue 4, page 814, February 2019. Q2 in Information Systems.

J31. F. Mastrogiovanni, X. Guo. The robot skin placement problem: a new technique to place triangular modules inside polygons. Intelligent Service Robotics, volume 12, issue 1, pages 27-43, January 2019. Q2 in Artificial Intelligence.

J30. A. Capitanelli, M. Maratea, F. Mastrogiovanni, M. Vallati. On the manipulation of articulated objects in human-robot cooperation scenarios. Robotics and Autonomous Systems, volume 109, pages 139-155, November 2018. **Q1** in Computer Science Applications, **Q1** in Software.

J29. L. Buoncompagni, A. Capitanelli, A. Carfì, F. Mastrogiovanni. From collaborative robots to work mates: a new perspective on human-robot cooperation. ERCIM News, volume 114, August 2018.

J28. K. Darvish, F. Wanderlingh, B. Bruno, E. Simetti, F. Mastrogiovanni, G. Casalino. Flexible human-robot cooperation models for assisted shop-floor tasks. Mechatronics, volume 51, pages 97-114, May 2018. Q2 in Computer Science Applications.

J27. D. Shah, E. Denicia, T. Pimentel, B. Bruno, F. Mastrogiovanni. Detection of bimanual gestures everywhere: why it matters, what we need and what is missing. Robotics and Autonomous Systems, volume 99, pages 30-49, January 2018. **Q1** in Computer Science Applications, **Q1** in Software.

J26. G. Casalino, E. Simetti, F. Wanderlingh, K. Darwish, B. Bruno, F. Mastrogiovanni. On autonomous robotic cooperation capabilities within factory and logistic scenarios. Procedia Manufacturing, volume 11, pages 147-163, June 2017.

J25. P. Beckerle, G. Salvietti, R. Unal, D. Pratichizzo, S. Rossi, C. Castellini, S. Hirche, S. Endo, H. Ben Amor, M. Ciocarlie, F. Mastrogiovanni, B. Argall, M. Bianchi. A human-robot interaction perspective on assistive and rehabilitation robotics. Frontiers in Neurorobotics, volume 11, page 24, May 2017. Q2 in Artificial Intelligence.

J24. F. Pratama, F. Mastrogiovanni, S. G. Lee, N. Y. Chong. Long-term knowledge acquisition using contextual information in a memory-inspired robot architecture. Journal of Experimental & Theoretical Artificial Intelligence, volume 29, number 2, pages 313-334, January 2017. Q3 in Artificial Intelligence, Q2 in Software.

J23. T. H. L. Lee, P. Maiolino, F. Mastrogiovanni, G. Cannata. Skinning a robot: design methodologies for large-scale robot skin. IEEE Robotics and Automation Magazine, volume 23, number 4, pages 150-159, December 2016. **Q1** in Computer Science Applications.

J22. S. Youssefi, S. Denei, F. Mastrogiovanni, G. Cannata. Skinware 2.0: a real-time middleware for robot skin. SoftwareX, volume 3-4, pages 6-12, December 2015. Q3 in Computer Science Applications, Q3 in Software.

J21. B. Bruno, F. Mastrogiovanni, A. Sgorbissa. Wearable inertial sensors: applications, challenges and test benches. IEEE Robotics and Automation Magazine, volume 22, number 3, pages 116-124, October 2015. **Q1** in Computer Science Applications.

J20. S. Youssefi, S. Denei, F. Mastrogiovanni, G. Cannata. A real-time data acquisition and processing framework for large-scale robot skin. Robotics and Autonomous Systems, volume 68, pages 86-103, April 2015. **Q1** in Computer Science Applications, **Q1** in Software.

J19. P. Maiolino, F. Galantini, F. Mastrogiovanni, G. Gallone, G. Cannata, F. Carpi. Soft dielectrics for capacitive sensing in robot skins: performance of different elastomer types. Sensors and Actuators A: Physical, volume 226, pages 37-47, February 2015.

J18. S. Denei, F. Mastrogiovanni, G. Cannata. Towards the creation of tactile maps for robots and their use in robot contact motion control. Robotics and Autonomous Systems, volume 63, pages 293-308, January 2015. **Q1** in Computer Science Applications, **Q1** in Software.

J17. D. Anghinolfi, G. Cannata, F. Mastrogiovanni, C. Nattero, M. Paolucci. Application and experimental validation of pheromone design in ant colony optimization: the problem of robot skin wiring. Applied Artificial Intelligence, volume 28, number 3, pages 292-321, January 2014. Q2 in Artificial Intelligence.

J16. A. Loi, P. Cosseddu, L. Basiricò, S. Lai, P. Maiolino, E. Baglini, S. Denei, F. Mastrogiovanni, G. Cannata, A. Bonfiglio. Organic bendable and stretchable field effect devices for sensing applications. IEEE Sensors Journal, volume 13, number 12, pages 4764-4772, December 2013.

J15. L. Iocchi, E. Menegatti, A. Bonarini, M. Matteucci, E. Pagello, L. Carlucci Aiello, D. Nardi, F. Mastrogiovanni, A. Sgorbissa, R. Zaccaria, R. Sorbello, A. Chella, M. Giardina, P. Zingaretti, E. Frontoni, A. Mancini, G. Cicirelli, A. Farinelli, D. Sorrenti. Development of intelligent service robots. Intelligenza Artificiale, volume 7, number 2, pages 139-152, November 2013. Q3 in Artificial Intelligence.

J14. D. Anghinolfi, G. Cannata, F. Mastrogiovanni, C. Nattero, M. Paolucci. On the problem of the automated design of large-scale robot skin. IEEE Transactions on Automation Science and Engineering, volume 10, number 4, pages 1087-1100, October 2013.

J13. F. Mastrogiovanni, A. Paikan, A. Sgorbissa. Semantic-aware real-time scheduling in Robotics. IEEE Transactions on Robotics, volume 29, number 1, pages 118-135, February 2013. **Q1** in Computer Science Applications.

J12. F. Mastrogiovanni, A. Sgorbissa. A behaviour sequencing and composition architecture based on ontologies for entertainment humanoid robots. Robotics and Autonomous Systems, volume 62, number 2, pages 170-183, December 2012. **Q1** in Computer Science Applications, **Q1** in Software.

J11. F. Mastrogiovanni, A. Sgorbissa. A biologically plausible, neural-inspired planning approach which does not solve 'the gourd, the monkey and the rice' puzzle. Journal of Bio-Inspired Cognitive Architectures, volume 2, pages 77-87, October 2012.

J10. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. How the location of the range sensor affects EKF-based localization. Journal of Intelligent and Robotic Systems: Theory and Applications, volume 68, number 2, pages 121-145, November 2012. Q2 in Artificial Intelligence, Q2 in Software.

J9. D. Anghinolfi, G. Cannata, F. Mastrogiovanni, C. Nattero, M. Paolucci. Heuristic approaches for the optimal wiring in large scale robotic skin design. Computers and Operations Research, volume 39, number 11, pages 2715–2724, November 2012. **Q1** in Computer Science (miscellaneous).

J8. A. Loi, L. Basiricò, P. Cosseddu, S. Lai, P. Maiolino, E. Baglini, S. Denei, F. Mastrogiovanni, G. Cannata, C. Palomba, M. Barbaro, A. Bonfiglio. Matrices of inkjet printed OFETs for the realisation of artificial robot skin. MRS Proceedings 1401, July 2012.

J7. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Robots and Intelligent Environments: Knowledge representation and distributed context assessment. Automatika, volume 52, number 3, September 2011. Q2 in Computer Science (miscellaneous).

J6. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Problem awareness for skilled humanoid robots. The International Journal of Machine Consciousness, volume 3, number 1, page 91-114, June 2011.

J5. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. A cognitive model for recognizing human behaviours in smart homes. Annals of Telecommunications, volume 65, number 9, pages 523-538, October 2010.

J4. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Activity recognition in smart homes: from specification to representation. International Journal of Intelligent and Fuzzy Systems, volume 21, number 1-2, pages 33-48, February 2010. Q3 in Artificial Intelligence, Q3 in Computer Science Applications, Q3 in Computational Theory and Mathematics, Q3 in Signal Processing.

J3. F. Capezio, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Robot-assisted surveillance in large environments. Journal of Computing and Information Technologies, volume 18, number 1, March 2009.

J2. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Robust navigation in an unknown environment with minimal sensing and representation. IEEE Transactions on System, Man and Cybernetics – Part B: Cybernetics, volume 39, number 1, pages 212-229, February 2009. **Q1** in Computer Science Applications, **Q1** in Human-Computer Interaction, **Q1** in Information Systems, **Q1** in Software (discontinued in 2015).

J1. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. On the problem of describing activities in context-aware environments. International Journal of Assistive Robotics and Mechatronics, volume 9, number 4, December 2008.

Book Chapters

BC23 A. Carfì, M. Alameh, V. Belcamino, F. Mastrogiovanni. A modular architecture for IMU-based data gloves. In C. Secchi, L. Marconi (Eds), European Robotics Forum 2024, Springer Proceedings in Advanced Robotics, January 2025.

BC22. F. Benedetti, A. Capitanelli, F. Mastrogiovanni, G.V. Vercelli. Long-term area coverage and radio relay positioning using swarms of UAVs. In C. Gao, C. Zhao (Eds), Cooperative Localization and Navigation: Theory, Research, and Practice, CRC Press, August 2019.

BC21. G. Cerruti, W. Z. Guo, F. Mastrogiovanni. A motion planning architecture for conveyance tasks with a quadruped robot. In W. Chen, K. Hosoda, Y. Fu, H. Wang, E. Menegatti, X. Wu (Eds), Intelligent Autonomous Systems 14, Advances in Intelligent Systems and Computing series, vol. 531, Springer International Publishing AG, New York, February 2017.

BC20. C. Nattero, F. Mastrogiovanni. Partition strategies for multi-robot area coverage with no communication. In W. Chen, K. Hosoda, Y. Fu, H. Wang, E. Menegatti, X. Wu (Eds), Intelligent Autonomous Systems 14, Advances in Intelligent Systems and Computing series, vol. 531, Springer International Publishing AG, New York, February 2017.

BC19. M. Bono, P. Maiolino, A. Lefebvre, F. Mastrogiovanni, H. Ishiguro. Challenges for robots acting on a stage: creating sequential structures for interaction and the interaction process with the audience. In R. Nakatsu, M. Rautenberg, P. Ciancarini (Eds.), Handbook of Digital Games and Entertainment Technologies, Springer, Singapore, February 2016.

BC18. R. Marino, F. Mastrogiovanni, A. Sgorbissa, R. Zaccaria. A minimalistic quadrotor navigation strategy for indoor multi-floor scenarios. In E. Menagatti, N. Michael, K. Berns, H. Yamaguchi (Eds), Intelligent Autonomous Systems 13, Advances in Intelligent Systems and Computing series, vol. 302, Springer International Publishing, Lausanne, Switzerland, 2016.

BC17. B. Bruno. F. Mastrogiovanni, A. Saffiotti, A. Sgorbissa. Using fuzzy logic to enhance classification of human motion primitives. In A. Laurent, O. Strauss, B. Bouchon-Meunier, R. R. Yager (Eds), Information Processing and Management of Uncertainty in Knowledge-Based Systems, Communications in Computer and Information Science, vol. 443, Springer International Publishing, Lausanne, Switzerland, 2014.

BC16. D. Anghinolfi, G. Cannata, F. Mastrogiovanni, C. Nattero, M. Paolucci. Experimental evaluation of pheromone structures for ant colony optimization: application to the robot skin wiring problem. In S. Fidanova (Ed.), Recent Advances in Computational Optimization, Studies in Computational Intelligence series, vol. 470, Springer, June 2013.

BC15. F. Mastrogiovanni, A. Sgorbissa, R. Zaccaria. Distributed sensing and human-Aware robot reasoning mechanisms. In N.Y. Chong (Ed.), Networking Humans, Robots and Environments, Bentham Books Publishers, Lausanne, Switzerland, May 2013.

BC14. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. On the representation and reasoning about temporal patterns of activities in smart environments. In S.M. Hazarika (Ed.), Qualitative Spatio-Temporal Representation and Reasoning: Trends and Future Directions. IGI Global, Hershey, PA, May 2012.

BC13. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Smart environments and activity recognition: a logic-based approach. In L. Chen, C. Nugent, J. Biswas and J. Hoey (Eds.), Activity Recognition in Pervasive Intelligent Environments, Ambient and Pervasive Intelligence series, volume 4, Atlantis Press, 2011.

BC12. F. Mastrogiovanni, A. Sgorbissa, M. Spotorno. Sviluppo di funzionalità avanzate dei GIS per la soluzione di problemi di *landscape assessment*. In C. Cerreti, L. Federzoni, S. Salgaro (Eds.), Cartografia di paesaggi – Paesaggi nella cartografia. Pàtron Editore, Bologna, Italy, 2010.

BC11. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. From autonomous robots to artificial ecosystems. In H. Nakashima, H. Aghajan and J.C. Augusto (Eds.), Handbook on Ambient Intelligence and Smart Environments. Springer-Verlag US, November 2009.

BC10. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Assessing temporal relationships between events in smart environments. In V. Callaghan, A. Kameas, A. Reyes, D. Royo, M. Weber (Eds.), Intelligent Environments 2009, IOS Press, Barcelona, Spain, July 20-21, 2009.

BC9. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Distributed context assessment for robots in intelligent environments. In H. Asama, H. Kurokawa, J. Ota, K. Sekiyama (Eds.), Distributed Autonomous Robotic Systems 8, Springer, Berlin Heidelberg, 2009. *Best Paper Award at DARS 2008*.

BC8. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. A framework for context-awareness in artificial systems. In I. Lovrek, R. J. Howlett, L. K. Jain (Eds.), Knowledge-based Intelligent Information and Engineering Systems 12, Lecture Notes in Artificial Intelligence, vol. 5177, Springer-Verlag, Berlin Heidelberg, 2008.

BC7. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. CDL: an integrated framework for context specification and recognition. In M. Ghallab, C. D. Spyropolous, N. Fakotakis, N. Avouris (Eds.), European Conference on Artificial Intelligence 2008, Frontiers in Artificial Intelligence and Applications series, vol. 178, IOS Press, Amsterdam, 2008.

BC6. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Designing a context-aware artificial system. In W. Burgard, R. Dillmann, C. Plagemann, N. Vahrenkamp (Eds.), Intelligent Autonomous Systems 10, IOS Press, Amsterdam, 2008.

BC5. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Learning to extract line features: beyond split & merge. In W. Burgard, R. Dillmann, C. Plagemann, N. Vahrenkamp (Eds.), Intelligent Autonomous Systems 10, IOS Press, Amsterdam, 2008.

BC4. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. An integrated approach to context specification and recognition in smart homes. In S. Helal, S. Mitra, J. Wong, C. K. Chang, M. Mokhtari (Eds.), Smart Homes and Health Telematics, Lecture Notes in Computer Science, vol. 5120, Springer, Berlin Heidelberg, 2008.

BC3. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. An active classification system for context representation and acquisition. In J. C. Augusto and D. Shapiro (Eds.). Advances in Ambient Intelligence. In the Frontiers of Artificial Intelligence and Application (FAIA) series, vol. 164, IOS Press, November 2007.

BC2. F. Capezio, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Mobile robots and intelligent environments. In R. Basili, M. T. Pazienza (Eds.) Artificial Intelligence and Human-Oriented Computing, Lecture Notes in Computer Science, vol. 4733, Springer Berlin / Heidelberg, 2007.

BC1. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Improving smart environments with knowledge ecosystems. In B. Apolloni, R. J. Howlett, L. Jain (Eds.), Knowledge-based and Intelligent Information & Engineering Systems, Lecture Notes in Computer Science, vol. 4694, Springer Berlin / Heidelberg, 2007.

Conferences, Symposia and Workshops[38]

C151. Y. Gao, D. Anguita, F. Roli, M-L. Zhang, F. Mastrogiovanni, L. Oneto. Multi-label complementary labels learning under hard logical constraints. Proceedings of the 34th European Symposium on Artificial Neural Networks, Computational Intelligence, and Machine Learning (ESANN), Bruges, Belgium, April 2026. CORE:B, LiveSHINE:B, MA:B.

C150. C. Flego, L. Pagan, F. Sasso, V. Belcamino, F. Mastrogiovanni. SONIC-CO-AGENCY: a modular tele-operated system for interactive sound. Proceedings of the 31st International Symposium on Electronic / Emerging Art (ISEA), Dubai, United Arab Emirates, April 2026.

C149. A. Thomas, F. Mastrogiovanni. A framework for task and motion planning based on expanding AND/OR graphs. Proceedings of the 18th Symposium on Advanced Space Technologies in Robotics and Automation (ASTRA), Leiden, The Netherlands, October 2025.

C148 D. Pasquali, L. Garello, G. Belgiovine, O. Eldardeer, L. Lastrico, F. Rea, F. Mastrogiovanni, G. Sandini, A. Sciutti. No robot is an island: an always-on cognitive architecture for social context awareness in dynamic environments. Proceedings of the 2025 IEEE International Conference on Development and Learning (ICDL), Prague, Czech Republic, September 2025. *Best Paper Award Candidate*.

C147 M. Petrelli, V. Parodi, A. Musu, M. Ágreda-Lopez, D. Belmonte, D. Perugini, J. Zhou Zhang, A. Carfì, F. Mastrogiovanni, M. Toplak, Z. Blaz. Introducing Orange-Volcanoes: a new tool for petrological, geochemical, and volcanological data mining. Proceedings of Goldschmidt2025, Prague, Czech Republic, July 2025.

C146 V. Belcamino, A. Carfì, V. Seidita, F. Mastrogiovanni, A. Chella. A social robot with inner speech for dietary guidance. Proceedings of the 19th International Conference on Intelligent Autonomous Systems (IAS-19), Genoa, Italy, July 2025.

[38] Rankings are expressed in the format "CORE:, LiveSHINE:, MA:" where those classifications are available. The GII-GRIN-SCIE Conference Rating database has been queried on Thursday, August 28th, 2025.

C145 A. Bulanti, A. Carfì, F. Mastrogiovanni. Towards proactive human-robot collaboration: a hierarchical model for predicting human actions and movements. Proceedings of the 19th International Conference on Intelligent Autonomous Systems (IAS-19), Genoa, Italy, July 2025.

C144 V. Belcamino, D.M.N. Le, Q.K. Luu, A. Carfì, A. Van Ho, F. Mastrogiovanni. A comparative study of human activity recognition: motion, tactile, and multi-modal approaches. Proceedings of the 19th International Conference on Intelligent Autonomous Systems (IAS-19), Genoa, Italy, July 2025.

C143 A. Capitanelli, N. Attolino, F. Mastrogiovanni. Achieving scalable robot autonomy via neurosymbolic planning using lightweight local LLM. Proceedings of the 19th International Conference on Intelligent Autonomous Systems (IAS-19), Genoa, Italy, July 2025.

C142 A. Musu, V. Parodi, M. Toplak, A. Carfì, M. Ágreda-Lopez, F. Mastrogiovanni, D. Perugini, Z. Blaz, M. Petrelli. Orange-Volcanoes: enhancing data-driven petro-volcanological analysis with applications in petrological volcano monitoring. EGU General Assembly 2025, Vienna, Austria, May 2025.

C141 D. Pasquali, C. Miceli, G. Belgiovine, F. Rea, F. Mastrogiovanni, G. Sandini, A. Sciutti. Artificial cognition: from the ground up. Proceedings of 40th Anniversary of the IEEE International Conference on Robotics and Automation (ICRA), Rotterdam, The Netherlands, September 2024. CORE:B, LiveSHINE:A++, MA:A++.

C140. A. Bellitto, E. Girardo, M. Casadio, F. Mastrogiovanni, M. Moro, C. Pierella, A. Carfì. TIAGo robot teleoperation via body-machine interface: enhancing assistance for cervical spinal cord injuried individuals. Proceedings of the 10th IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob), Heidelberg, Germany, September 2024. MA:B-.

C139. A. Hammoud, V. Belcamino, Q. Huet, A. Carfì, M. Khoramshahi, V. Perdereau, F. Mastrogiovanni. Robotic in-hand manipulation based on relaxed optimization concept. Proceedings of the 2024 IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), Pasadina, CA, USA, August 2024. LiveSHINE:A-, MA:A-.

C138. M. Shabaan, S. Macciò, A. Carfì, F. Mastrogiovanni. Investigating mixed reality for communication between humans and mobile manipulators. Proceedings of the 2024 IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), Pasadena, CA, USA, August 2024. LiveSHINE:A-, MA:A-.

C137. V. Belcamino, M. Kilina, L. Lastrico, A. Carfì, F. Mastrogiovanni. A modular framework for flexible human-robot collaboration planning. Proceedings of the 2024 IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), Pasadena, CA, USA, August 2024. LiveSHINE:A-, MA:A-.

C136. S. Macciò, M. Shabaan, A. Carfì, F. Mastrogiovanni. Kinesthetic teaching in robotics: a mixed reality approach. Proceedings of the 2024 IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), Pasadena, CA, USA, August 2024. LiveSHINE:A-, MA:A-.

C135. V. Belcamino, M. Takase, M. Kilina, A. Carfì, F. Mastrogiovanni, A. Shimada, S. Shimizu. Gaze-based intention recognition for human-robot collaboration. Proceedings of the 17th ACM International Conference on Advanced Visual Interfaces (AVI), Arenzano, Italy, July 2024. CORE:B, LiveSHINE:B, MA:B.

C134. Y. Noguchi, S. Shimizu, T. Takamura, A. Carfì, F. Mastrogiovanni. Registration of 3D point clouds with "credibility" for changing environments. Proceedings of the 16th IEEE/SICE International Symposium on System Integration (SII), Ha Long, Vietnam, January 2024. MA:C.

C133. L. Lastrico, N. F. Duarte, A. Carfì, F. Rea, F. Mastrogiovanni, J. Santos-Victor, A. Sciutti. Like robots, like humans: pupil dilation during collaborative object manipulation. Proceedings of the 21st IEEE International Conference on Advanced Robotics (ICAR), Abu Dhabi, UAE, December 2023. LiveSHINE:B, MA:B-.

C132. T. Oda, S. Shimizu, A. Carfì, F. Mastrogiovanni. Falcon: wide angle fovea vision system for marine rescue drone. Proceedings of the 49th IEEE Annual Conference of Industrial Electronics Society (IECON), Singapore, October 2023. MA:B.

C131. L. Lastrico, N. Ferreira Duarte, A. Carfì, F. Rea, A. Sciutti, F. Mastrogiovanni, J. Santos-Victor. Expressing and inferring action carefulness in human-to-robot handovers. Proceedings of the 2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Detroit, Michigan, USA, October 2023. CORE:A, LiveSHINE:A+, MA:A++.

C130. A. Roda, A. Carfì, F. Mastrogiovanni. A flexible approach to PCB characterization for recycling. Proceedings of the 14th International Conference on Computer Vision Systems (ICVS), Wien, Austria, September 2023. CORE:C, LiveSHINE:B, MA:C.

C129. S. Macciò, S. Mohamad, A. Carfì, F. Mastrogiovanni. RICO-MR: an open-source architecture for robot intent communication through mixed reality. Proceedings of the 32nd International Symposium on Human and Robot Interactive Communication (RO-MAN), Busan, Corea, August 2023. LiveSHINE:A-, MA:A-.

C128. A. Thomas, F. Mastrogiovanni, M. Baglietto. Revisiting the minimum constraint removal problem in mobile robotics. Proceedings of the 18th International Conference on Intelligent Autonomous Systems (IAS-18), Suwon, Corea, July 2023.

C127. R. Lastrico, S. Macciò, A. Carfì, P. Traverso, F. Mastrogiovanni. Estimation of kidney's blood vessels deformations for robot assisted surgery. Proceedings of the 18th International Conference on Intelligent Autonomous Systems (IAS-18), Suwon, Corea, July 2023.

C126. S. Mohamad, A. Carfì, F. Mastrogiovanni. Digital Twins for human-robot collaboration: a future perspective. Proceedings of the 18th International Conference on Intelligent Autonomous Systems (IAS-18), Suwon, Corea, July 2023.

C125. T. Takamura, S. Shimizu, R. Nakamoto, A. Carfì, F. Mastrogiovanni. Extension of undistorted region of wide angle fovea image using projective transformation. Proceedings of the 9th IEEJ International Workshop on Sensing, Actuation, Motion Control, and Optimization (SAMCON), Nanjing, China, March 2023.

C124. A. Thomas, G. Ferro, F. Mastrogiovanni, M. Robba. Computational tradeoff in minimum obstacle displacement planning for robot navigation. Proceedings of the 2023 IEEE International Conference on Robotics and Automation (ICRA), London, UK, June 2023. CORE:B, LiveSHINE:A++, MA:A++.

C123. M. Kilina, T. Elia, Y.K. Syed, A. Carfì, F. Mastrogiovanni. Embodiment perception of a smart home assistant. Proceedings of the 14th International Conference on Social Robotics (ICSR), Florence, Italy, December 2022.

C122. L. Lastrico, N. Ferreira Duarte, A. Carfì, F. Rea, F. Mastrogiovanni, A. Sciutti. If you are careful, so am I! How robot communicative motions can influence the human approach in a joint task. Proceedings of the 14th International Conference on Social Robotics (ICSR), Florence, Italy, December 2022.

C121. R. Nakamoto, S. Shimizu, T. Takamura, A. Carfì, F. Mastrogiovanni, A. Sciutti. Sidewinder: snake robot's stereo vision system for rescue in collapsed debris at disaster sites. Proceedings of the 48th IEEE Annual Conference of Industrial Electronics Society (IECON), Brussels, Belgium, October 2022. MA:B.

C120. M. Shabaan, S. Macciò, A. Carfì, F. Mastrogiovanni. Integrating digital twins and mixed reality in human-robot collaboration. Proceedings of the 4th Italian Conference on Robotics and Intelligent Machines (I-RIM), Rome, Italy, October 2022.

C119. V. Belcamino, A. Carfì, M. Alameh, F. Mastrogiovanni. TERglove: a modular, low-cost, IMU-based data glove. Proceedings of the 4th Italian Conference on Robotics and Intelligent Machines (I-RIM), Rome, Italy, October 2022.

C118. A. Iannone, A. Thomas, F. Mastrogiovanni. A framework for multi-robot task and motion planning. Proceedings of the 4th Italian Conference on Robotics and Intelligent Machines (I-RIM), Rome, Italy, October 2022.

C117. L. Lastrico, L. Garello, F. Rea, N. Noceti, F. Mastrogiovanni, A. Sciutti, A. Carfì. Robots with different embodiments can express and influence carefulness in object manipulation. Proceedings of the 12th International Conference on Development and Learning (ICDL), London, UK, September 2022.

C116. H. Ali, V. Belcamino, A. Carfì, V. Perdereau, F. Mastrogiovanni. In-hand manipulation planning using human motion dictionary. Proceedings of the 31st International Conference on Robot and Human Interactive Communication (RO-MAN), Naples, Italy, August 2022. LiveSHINE:A-, MA:A-.

C115. I. Torre, L. Mirenda. G. Vercelli, F. Mastrogiovanni. Prerequisite graph extraction from lectures. Proceedings of the 23rd International Conference on Artificial Intelligence in Education (AIED), Durham, UK, July 2022. CORE:A, LiveSHINE:B, MA:B.

C114. A. Bongiovanni, A. De Luca, L. Gava, L. Grassi, M. Lagomarsino, M. Lapolla, A. Marino, P. Roncagliolo, S. Macciò, A. Carfì, F. Mastrogiovanni. Gestural and touchscreen interaction for human-robot collaboration: a comparative study. Proceedings of the 17th International Conference on Intelligent Autonomous Systems (IAS-17), Zagreb, Croatia, June 2022.

C113. A. Thomas, F. Mastrogiovanni. Minimum displacement motion planning for movable obstacles. Proceedings of the 17th International Conference on Intelligent Autonomous Systems (IAS-17), Zagreb, Croatia, June 2022.

C112. S. Macciò, A. Carfì, F. Mastrogiovanni. Mixed reality as communication medium for human-robot collaboration. Proceedings of the 2022 IEEE International Conference on Robots and Automation (ICRA), Philadelphia, PA, USA, May 2022. CORE:B, LiveSHINE:A++, MA:A++.

C111. E. Merlo, E. Lamon, F. Fusaro, M. Lorenzini, A. Carfì, F. Mastrogiovanni, A. Ajoudani. Dynamic human-robot role allocation based on human ergonomics risk prediction and robot actions adaptation. Proceedings of the 2022 IEEE International Conference on Robots and Automation (ICRA), Philadelphia, PA, USA, May 2022. CORE:B, LiveSHINE:A++, MA:A++.

C110. H. Karami, A. Thomas, F. Mastrogiovanni. Task allocation for multi-robot task and motion planning: a case for object picking in cluttered workspaces. Proceedings of the 20th International Conference of the Italian Association for Artificial Intelligence (AI*IA), Udine, Italy, December 2021. LiveSHINE:C, MA:C.

C109. L. Lastrico, A. Carfì, F. Rea, A. Sciutti, F. Mastrogiovanni. From movement kinematics to object properties: online recognition of human carefulness. Proceedings of the 13th International Conference on Social Robotics (ICSR), Singapore, November 2021.

C108. B. Omarali, K. Althoefer, F. Mastrogiovanni, M. Valle, I. Farkhatdinov. Workspace scaling and rate mode control for virtual reality based robot teleoperation. Proceedings of the 2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC), Anywhere on Earth, November 2021. CORE:B, LiveSHINE:B, MA:A++.

C107. S. Macciò, A. Carfì, F. Mastrogiovanni. A mixed reality architecture for human-robot collaboration. Proceedings of the 3rd Italian Conference on Robotics and Intelligent Machines (I-RIM), Rome, Italy, October 2021.

C106. E. Merlo, E. Lamon, M. Lorenzini, F. Fusaro, A. Carfì, F. Mastrogiovanni, A. Ajoudani. Towards dynamic human-robot role allocation based on human ergonomics assessment. Proceedings of the 3rd Italian Conference on Robotics and Intelligent Machines (I-RIM), Rome, Italy, October 2021.

C105. L. Garello, L. Lastrico, F. Mastrogiovanni, A. Sciutti, N. Noceti, F. Rea. A generative model towards conditioned robotic object manipulation. Proceedings of the 3rd Italian Conference on Robotics and Intelligent Machines (I-RIM), Rome, Italy, October 2021.

C104. M. Dicenzi, L. Lastrico, A. Carfì, A. Sciutti, F. Mastrogiovanni, F. Rea. Recognizing Italian gestures with wearable sensors. Proceedings of the 3rd Italian Conference on Robotics and Intelligent Machines (I-RIM), Rome, Italy, October 2021.

C103. T. Takamura, S. Shimizu, R. Murakami, A. Carfì, F. Mastrogiovanni. Visual odometry for wide angle fovea sensor SLAM. Proceedings of the 47th Annual Conference of the IEEE Industrial Electronics Society (IECON), Anywhere on Earth, October 2021. MA:B.

C102. H. Karami, A. Carfì, F. Mastrogiovanni. Branched AND/OR graphs: towards flexible and adaptable human-robot collaboration. Proceedings of the 30th International Conference on Robot and Human Interactive Communication (RO-MAN), Anywhere on Earth, August 2021. LiveSHINE:A-, MA:A-.

C101. L. Garello, L. Lastrico, F. Rea, F. Mastrogiovanni, A. Noceti, A. Sciutti. Property-aware robot object manipulation: a generative approach. Proceedings of the 11th International Conference on Development and Learning (ICDL-EpiRob), Beijing, China, August 2021.

C100. A. Thomas, F. Mastrogiovanni, M. Baglietto. Probabilistic collision constraint for motion planning in dynamic environments. Proceedings of the 16th International Conference on Intelligent Autonomous Systems (IAS-16), Singapore, July 2021.

C99. D. Lanza, P. Solinas, F. Mastrogiovanni. Multi-sensory integration in a quantum-like robot perception model. Proceedings of the 17th International Symposium on Experimental Robotics (ISER), La Valletta, Malta, March 2021. LiveSHINE:B, MA:B.

C98. L. Lastrico, A. Carfì, A. Vignolo, A. Sciutti, F. Mastrogiovanni, F. Rea. Careful with that! Observation of human movements to estimate objects properties. Proceedings of the 13th International Workshop on Human-Friendly Robotics (HFR), Anywhere on Earth, October 2020. *Best Paper Award Finalist.*

C97. P. Maiolino, L. Ottoveggio, E. Montalesi, S. Denei, F. Mastrogiovanni, M. Casadio, G. Cannata. A wearable sensorised thimble for the assessment and rehabilitation of grasping. Proceedings of the 5th International Conference on NeuroRehabilitation (ICNR), Anywhere on Earth, October 2020.

C96. R. Bertolucci, A. Capitanelli, M. Maratea, F. Mastrogiovanni, M. Vallati. Collaborative robotic manipulation: a use case of articulated objects in three-dimensions with gravity. Proceedings of the 32th IEEE International Conference on Tools with Artificial Intelligence (ICTAI), Baltimore, Maryland, US, November 2020. CORE:B, LiveSHINE:B, MA:B.

C95. H. Karami, K. Darvish, F. Mastrogiovanni. A task allocation approach for human-robot collaboration in product defects inspection scenarios. Proceedings of the 29th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Anywhere on Earth, September 2020. LiveSHINE:A-, MA:A-.

C94. A. Thomas, F. Mastrogiovanni, M. Baglietto. Towards multi-robot task-motion planning for navigation in belief space. Proceedings of the 9th European Starting Artificial Intelligence Researchers' Symposium (STAIRS), Anywhere on Earth, September 2020. LiveSHINE:C.

C93. A. Carfì, M. Alameh, F. Mastrogiovanni. A multi-modal hand-object interaction sensing platform. Proceedings of the ICRA 2020 Workshop on "Shaping the quality metric of a grasp with the manipulation task: grasping as a sub-action of object manipulation", Anywhere on Earth, July 2020.

C92. R. Delrio, G. Ballardini, M. Casadio, F. Mastrogiovanni, I. Nisky. Stiffness discrimination performance in a virtual surgical incision task. Proceedings of the ICRA 2020 Workshop on "Learning of manual skills in humans and robots", Anywhere on Earth, June 2020.

C91. R. Bertolucci, A. Capitanelli, M. Maratea, F. Mastrogiovanni, M. Vallati. Automated planning encodings for the manipulation of articulated objects in 3D with gravity. Proceedings of the 18th International Conference of the Italian Association for Artificial Intelligence (AI*IA), Rende, Italy, November 2019. LiveSHINE:C, MA:C.

C90. A. Thomas, F. Mastrogiovanni, M. Baglietto. Task-motion planning for navigation in belief space. Proceedings of the 2019 International Symposium on Robotics Research (ISRR), Hanoi, Vietnam, October 2019. CORE:A, SHINE:B-.

C89. L. Buoncompagni, F. Mastrogiovanni. Teaching a robot how to spatially arrange objects: representation and recognition issues. Proceedings of the 28th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), New Delhi, India, November 2019. LiveSHINE:A-, MA:A-.

C88. R. Bertolucci, A. Capitanelli, C. Dodaro, N. Leone, M. Maratea, F. Mastrogiovanni, M. Vallati. An ASP-based framework for the manipulation of articulated objects using dual-arm robots. Proceedings of the 15th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR), Philadelphia, PA, USA, June 2019. CORE:B, LiveSHINE:B, MA:C.

C87. S.Y. Kareem, L. Buoncompagni, F. Mastrogiovanni. Arianna+: scalable human activity recognition by reasoning with a network of ontologies. Proceedings of the 17th International Conference of the Italian Association for Artificial Intelligence (AI*IA), Trento, Italy, November 2018. LiveSHINE:C, MA:C.

C86. S. Ghosh, M. Moura, L. Buoncompagni, F. Mastrogiovanni. A scalable approach for multi-modal qualitative teleoperation of mobile robots. Proceedings of the 17th International Conference of the Italian Association for Artificial Intelligence (AI*IA), Trento, Italy, November 2018. LiveSHINE:C, MA:C.

C85. L. Buoncompagni, A. Capitanelli, F. Mastrogiovanni. ARMOR: a ROS service for general-purpose OWL reasoning based on sensory inferences. Proceedings of the 5th AI*IA 2018 Italian Workshop on "Artificial Intelligence and Robotics", Trento, Italy, November 2018.

C84. L. Buoncompagni, A. Carfi, F. Mastrogiovanni. A software architecture for multi-modal semantic perception fusion. Proceedings of the 5th AI*IA 2018 Italian Workshop on "Artificial Intelligence and Robotics", Trento, Italy, November 2018.

C83. R. Bertolucci, A. Capitanelli, C. Dodaro, M. Maratea, F. Mastrogiovanni, M. Vallati. KR&R approaches for robot manipulation tasks with articulated objects. Proceedings of the 2018 AI*IA 2018 RCRA meeting (RiCeRcA 2018), Trento, Italy, November 2018.

C82. A. Thomas, S. Amatya, F. Mastrogiovanni, M. Baglietto. Towards perception aware task-motion planning. Proceedings of the 2018 AAAI Fall Symposium on Reasoning and Learning in Real-World Systems for Long-Term Autonomy (LTA), Arlington, WA, October 2018.

C81. L. E. Coronado, F. Mastrogiovanni, G. Venture. Development of intelligent behaviors for social robots via user-friendly and modular programming tools. Proceedings of the 2018 IEEE Workshop on Advanced Robotics and its Social Impact (ARSO), Genoa, Italy, September 2018. MA:C.

C80. K. Darvish, B. Bruno, E. Simetti, F. Mastrogiovanni, G. Casalino. Interleaved online task planning, simulation, task allocation and motion control for flexible human-robot cooperation. Proceedings of the 27th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Nanjing, China, August 2018. LiveSHINE:A-, MA:A-.

C79. L. Buoncompagni, F. Mastrogiovanni. Dialogue-based supervision and explanation of robot spatial beliefs: a software architecture perspective. Proceedings of the 27th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Nanjing, China, August 2018. LiveSHINE:A-, MA:A-.

C78. A. Carfi, C. Motolese, B. Bruno, F. Mastrogiovanni. Online human gesture recognition using recurrent neural networks and wearable sensors. Proceedings of the 27th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Nanjing, China, August 2018. LiveSHINE:A-,MA:A-.

C77. C. Patrone, C. Martini, A. Cella, A. Barla, F. Mastrogiovanni, F. Odone, N. Casiddu, S. Pericu, C. Porfirione, R. Boi, M. Puntoni, A. Verri, A. Pilotto. Development of a smart technology based post hospitalisation facility for older people. Proceedings of the 9th Italian Forum on Ambient Assisted Living (ForItAAL), Lecce, Italy, July 2018.

C76. L. Buoncompagni, A. Dinale, F. Mastrogiovanni. The importance of remembering and forgetting in smart agents. Proceedings of the 15th International Conference on Ubiquitous Robotics (UR), Hawaii, USA, June 2018.

C75. A. Thomas, S. Amatya, F. Mastrogiovanni, M. Baglietto. Task-motion planning in belief space. Proceedings of the RSS 2018 Workshop on "Task and Motion Planning", co-located with RSS 2018, Pittsburgh, PA.

C74. L. E. Coronado, F. Mastrogiovanni, G. Venture. Design of a human-centered robot framework for end-user programming and applications. Proceedings of the 22nd CISM IFToMM Symposium on Robot Design, Dynamics and Control (ROMANSY), Rennes, France, June 2018.

C73. K. Darvish, B. Bruno, E. Simetti, F. Mastrogiovanni, G. Casalino. A flexible human-robot cooperation architecture with online planning and task allocation. Proceedings of the ICRA 2018 Workshop "The workplace is better with intelligent, collaborative, robot mates", Brisbane, Australia, June 2018.

C72. J. Villalobos, E. Coronado, A. Carfi, B. Bruno, F. Mastrogiovanni. Is kinesthetic teaching what smart factories really need? Proceedings of the 4th AI*IA 2017 Italian Workshop on "Artificial Intelligence and Robotics", Bari, Italy, November 2017.

C71. L. Buoncompagni, F. Mastrogiovanni, A. Saffiotti. Scene learning, recognition and similarity detection in a fuzzy ontology via human examples. Proceedings of the 4th AI*IA 2017 Italian Workshop on "Artificial Intelligence and Robotics", Bari, Italy, November 2017.

C70. A. Capitanelli, M. Maratea, F. Mastrogiovanni, M. Vallati. Automated planning techniques for robot manipulation tasks involving articulated objects. Proceedings of the 16th Italian Conference on Artificial Intelligence (AI*IA), Bari, Italy, November 2017. LiveSHINE:C, MA:C.

C69. L. Buoncompagni, A. Capitanelli, F. Mastrogiovanni. A ROS multi-ontology reference service: OWL reasoners and application prototyping issues. Proceedings of the RO-MAN 2017 Workshop on "Autonomous Robot Ontology", Lisbon, Portugal, August 2017.

C68. B. Bruno, F. Mastrogiovanni, F. Pecora, A. Sgorbissa, A. Saffiotti. A framework for culture-aware robots based on Fuzzy Logic. Proceedings of the 2017 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), Naples, Italy, July 2017. CORE:B, LiveSHINE:B, MA:A-.

C67. L. Buoncompagni, B. Bruno, A. Giuni, F. Mastrogiovanni, R. Zaccaria. Arianna: towards a new paradigm for assistive technology at home. Proceedings of the Eight Italian Forum on Ambient Assisted Living (ForItAAL), Genoa, Italy, June 2017.

C66. E. Coronado, J. Villalobos, B. Bruno, F. Mastrogiovanni. Gesture-based robot control: design challenges and evaluation with humans. Proceedings of the 2017 IEEE International Conference on Robotics and Automation (ICRA), Singapore, May 2017. CORE:B, LiveSHINE:A++, MA:A++.

C65. T. Khan, M. Khosravi, S. Denei, P. Maiolino, W. Kasprzak, F. Mastrogiovanni, G. Cannata. A tactile-based fabric learning and classification architecture. Proceedings of the 2016 IEEE International Conference on Information and Automation in Sustainability (ICIAfS), Galle, Sri Lanka, December 2016.

C64. A. Capitanelli, F. Mastrogiovanni. An ontology-based hybrid architecture for planning and robust execution in tabletop scenarios. Proceedings of the 3rd AI*IA 2016 Italian Workshop on "Artificial Intelligence and Robotics", Genoa, Italy, November 2016.

C63. K. Darvish, B. Bruno, E. Simetti, F. Mastrogiovanni, G. Casalino. An adaptive human-robot cooperation framework for assembly-like tasks. Proceedings of the 3rd AI*IA 2016 Italian Workshop on "Artificial Intelligence and Robotics", Genoa, Italy, November 2016.

C62. B. Bruno, F. Mastrogiovanni, F. Pecora, A. Saffiotti, A. Sgorbissa. Fuzzy logic for culture-aware Robotics. Proceedings of the 3rd AI*IA 2016 Italian Workshop on "Artificial Intelligence and Robotics", Genoa, Italy, November 2016.

C61. L. Buoncompagni, F. Mastrogiovanni. An open framework to develop and validate techniques for speech analysis. Proceedings of the 3rd AI*IA 2016 Italian Workshop on "Artificial Intelligence and Robotics", Genoa, Italy, November 2016.

C60. C. Bassani, A. Scalmato, F. Mastrogiovanni, A. Sgorbissa. Towards an integrated and human-friendly path following and obstacle avoidance behaviour for robots. Proceedings of the 2016 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), New York, USA, August 2016. LiveSHINE:A-, MA:A-.

C59. B. Bruno, F. Mastrogiovanni, A. Sgorbissa. HOOD: a real environment human odometry dataset for wearable sensor placement analysis. Proceedings of the 2015 IEEE-RSJ International Conference on Intelligent Robots and Systems (IROS), Hamburg, Germany, October 2015. CORE:A, LiveSHINE:A+, MA:A++.

C58. L. Buoncompagni, F. Mastrogiovanni. A software architecture for object perception and semantic representation. Proceedings of the 2nd AI*IA 2015 Italian Workshop on "Artificial Intelligence and Robotics", Ferrara (Italy), September 2015.

C57. Y. Tirupachuri, P. Ramadoss, B. Bruno, F. Mastrogiovanni. Human-robot cooperation: is wearable sensing the way to go? Proceedings of the 2015 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Kobe, Japan, August 2015. LiveSHINE:A-, MA:A-.

C56. B. Bruno, J. Grosinger, F. Mastrogiovanni, F. Pecora, A. Saffiotti, S. Sathyakeerthy, A. Sgorbissa. Multi-modal sensing for human activity recognition. Proceedings of the 2015 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Kobe, Japan, August 2015. LiveSHINE:A-, MA:A-.

C55. F. Pratama, F. Mastrogiovanni, S. Jeong, N. Y. Chong. Long-term knowledge acquisition in a memory-based robot epigenetic architecture for verbal interactions. Proceedings of the 2015 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Kobe, Japan, September 2015. LiveSHINE:A-, MA:A-.

C54. S. R. Ahmadzadeh, A. Paikan, F. Mastrogiovanni, L. Natale, P. Kormushev and D. G. Caldwell. Learning symbolic representations of actions from human demonstrations. Proceedings of the 2015 IEEE International Conference on Robotics and Automation (ICRA), Seattle, USA, May 2015. CORE:B, LiveSHINE:A++, MA:A++.

C53. B. Bruno. F. Mastrogiovanni, A. Sgorbissa. A public domain dataset for ADL recognition using wrist-placed accelerometers. Proceedings of the 2014 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Edinburgh, Scotland, UK, August 2014. LiveSHINE:A-, MA:A-.

C52. F. Pratama, F. Mastrogiovanni, N. Y. Chong. An integrated epigenetic robot architecture via context-influenced long-term memory. Proceedings of the 2014 International Conference on Development and Learning and on Epigenetic Robotics (ICDL-EpiRob), Genova, Italy, October 2014.

C51. E. Baglini, S. Youssefi, F. Mastrogiovanni, G. Cannata. A real-time distributed architecture for large-scale tactile sensing. Proceedings of the 2014 IEEE-RSJ International Conference on Intelligent Robots and Systems (IROS), Chicago, IL, September 2014. CORE:A, LiveSHINE:A+, MA:A++.

C50. S. Youssefi, S. Denei, F. Mastrogiovanni, G. Cannata. A real-time middleware for the acquisition of tactile data from large-scale robot skin. Proceedings of the 2014 IEEE International Conference on Robotics and Automation (ICRA), Hong Kong, China, June 2014. CORE:B, LiveSHINE:A++, MA:A++.

C49. B. Bruno, F. Mastrogiovanni, A. Sgorbissa. Functional requirements and design issues for a socially assistive robot for elderly people with mild cognitive impairments. Proceedings of the 2013 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Gyeongju Island, August 2013. LiveSHINE:A-, MA:A-.

C48. P. Maiolino, S. Denei, F. Mastrogiovanni, G. Cannata. A sensorized glove for experiments in cloth manipulation. Proceedings of the 2013 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Gyeongju Island, Korea, August 2013. LiveSHINE:A-, MA:A-.

C47. B. Bruno, F. Mastrogiovanni, A. Sgorbissa, T. Vernazza, R. Zaccaria. Analysis of human behavior recognition algorithms based on acceleration data. Proceedings of the 2013 IEEE International Conference on Robotics and Automation (ICRA), Karlsruhe, Germany, May 2013. CORE:B, LiveSHINE:A++, MA:A++.

C46. L. Muscari, L. Seminara, F. Mastrogiovanni, M. Valle, M. Capurro, G. Cannata. Real-time reconstruction of contact shapes for large-area robot skin. Proceedings of the 2013 IEEE International Conference on Robotics and Automation (ICRA), Karlsruhe, Germany, May 2013. CORE:B, LiveSHINE:A++, MA:A++.

C45. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa, R. Zaccaria. Providing robots with problem awareness skills. Proceedings of the 2012 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Paris, France, September 2012. LiveSHINE:A-, MA:A-.

C44. D. Anghinolfi, G. Cannata, F. Mastrogiovanni, C. Nattero, M. Paolucci. Experimental analysis of different pheromone structures in ant colony optimization for robotic skin design. In Proceedings of the 2012 Federated Conference on Computer Science and Information Systems (FedCSIS), Wroclaw, Poland, September 2012. CORE:B, LiveSHINE:B-, MA:C. *2012 IFSA Award for Young Scientist*.

C43. S. Denei, F. Mastrogiovanni, G. Cannata. Parallel force-position control mediated by tactile maps for robot contact task. Proceedings of the 2012 IEEE-RSJ International Conference on Intelligent Robots and Systems (IROS), Villamoura, Portugal, October, 2012. CORE:A, LiveSHINE:A+, MA:A++.

C42. B. Bruno, F. Mastrogiovanni, A. Sgorbissa, T. Vernazza, R. Zaccaria. Human motion modelling and recognition: a computational approach. Proceedings of the 2012 IEEE International Conference on Automation Science and Engineering (CASE), Seoul, Korea, August 2012.

C41. P. Cosseddu, L. Basiricò, A. Loi, S. Lai, P. Maiolino, E. Baglini, S. Denei, F. Mastrogiovanni, G. Cannata, A. Bonfiglio. Inkjet printed organic thin film transistor based tactile transducers for artificial robot skin. Proceedings of the 2012 IEEE International Conference on Biomedical Robotics and Biomechatronics (BioRob), Rome, Italy, June 2012. MA:B-.

C40. S. Youssefi, S. Denei, F. Mastrogiovanni, G. Cannata. A middleware for whole body skin-like tactile systems. Proceedings of the 2011 IEEE-RAS International Conference on Humanoid Robotics (HUMANOIDS), Bled, Slovenia, October 2011. LiveSHINE:B, MA:A-.

C39. T-H-L. Le, P. Maiolino, A. Schmitz, F. Mastrogiovanni, G. Cannata. A toolbox for supporting the design of large-scale tactile systems. Proceedings of the 2011 IEEE-RAS International Conference on Humanoid Robotics (HUMANOIDS), Bled, Slovenia, October 2011. LiveSHINE:B, MA:A-.

C38. A. Del Prete, S. Denei, L. Natale, F. Mastrogiovanni, F. Nori, G. Cannata and G. Metta. Skin spatial calibration using force/torque measurements. Proceedings of the 2011 IEEE-RSJ International Conference on Intelligent Robots and Systems (IROS). San Francisco, CA, September 2011. CORE:A, LiveSHINE:A+, MA:A++.

C37. A. Scalmato, A. Sgorbissa, F. Capezio, F. Mastrogiovanni, P. Vernazza, T. Vernazza, R. Zaccaria. Mobile robots in hospital environments: an installation case study. Proceedings of the 5th International Conference on Mobile Robots (ECMR), Orebro, Sweden, September 2011. MA:C.

C36. A. Salerno, F. Viziano, F. Mastrogiovanni, A. Sgorbissa, R. Zaccaria. Composition of behaviour primitives for entertainment humanoid robots. Proceedings of the 20th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Atlanta, GA, August 2011. LiveSHINE:A-, MA:A-.

C35. P. Ziafati, F. Mastrogiovanni, A. Sgorbissa. Fast prototyping and deployment of context-aware smart outdoor environments. Proceedings of the 2011 International Conference on Intelligent Environments (IE), Nottingham, UK, August 2011. CORE:B, LiveSHINE:C, MA:C.

C34. F. Mastrogiovanni, A. Bagnasco, G. Allasia, A. Giuni. The SHELL project: a secure habitat for an enhanced long living – design and implementation guidelines for a new concept of people assistance. Proceedings of the 3rd International Symposium on Applied Sciences in Biomedical and Communication Technologies (ISABEL), Rome, Italy, November 2010. MA:C.

C33. E. Baglini, G. Cannata, F. Mastrogiovanni. Design of an embedded networking infrastructure for whole-body tactile sensing in humanoid robots. Proceedings of the 2010 IEEE-RAS International Conference on Humanoid Robotics (HUMANOIDS), Nashville, TN, USA, December 2010. LiveSHINE:B, MA:A-.

C32. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. A language for describing human activities to be recognized by robots and intelligent Environments. Proceedings of the IROS 2010 Workshop on "Ubiquitous Networking Robotics", Taipei, Taiwan, October 2010.

C31. G. Cannata, S. Denei, F. Mastrogiovanni. A framework for representing interaction tasks based on tactile data. Proceedings of the 2010 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Viareggio, Italy, September 2010. LiveSHINE:A-, MA:A-.

C30. G. Cannata, S. Denei, F. Mastrogiovanni. Tactile sensing: steps to artificial somatosensory maps. Proceedings of the 2010 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Viareggio, Italy, September 2010. LiveSHINE:A-, MA:A-. *Best Paper Award*.

C29. G. Cannata, S. Denei, F. Mastrogiovanni. Contact-based robot control through tactile maps. Proceedings of the 49th IEEE Conference on Decision and Control (CDC), Atlanta, GA, December 2010. LiveSHINE:A-, MA:A+.

C28. G. Cannata, S. Denei, F. Mastrogiovanni. On internal models for representing tactile information. Proceedings of the 2010 IEEE-RSJ International Conference on Intelligent Robots and Systems (IROS), Taipei, Taiwan, October 2010. CORE:A, LiveSHINE:A+, MA:A++.

C27. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Affordance-based planning for assisting humans in daily activities. Proceedings of the 2010 International Conference on Intelligent Environments (IE), Kuala Lumpur, Malaysia, July 2010. CORE:B, LiveSHINE:C, MA:C.

C26. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Distributed context assessment: a case study with robots in intelligent environments. Proceedings of the 2010 IEEE-ASME International Conference on Mechatronics and Embedded Systems and Applications (MESA), Qingdao, Shandon, China, July 2010.

C25. G. Cannata, S. Denei, F. Mastrogiovanni. Towards automated self-calibration of robot skin. In Proceedings of the 2010 IEEE International Conference on Robotics and Automation (ICRA), Anchorage, Alaska, May 2010. CORE:B, LiveSHINE:A++, MA:A++.

C24. G. Cannata, R. Dahiya, M. Maggiali, F. Mastrogiovanni, G. Metta, M. Valle. Modular skin for humanoid robot systems. Proceedings of the 4th International Conference on Cognitive Systems (CogSys), Zurich, Switzerland, January 2010.

C23. A. Sgorbissa, F. Mastrogiovanni, A. Scalmato, R. Zaccaria. Human-like planning for humans and humanoids. Proceedings of the 4th International Conference on Cognitive Systems (CogSys), Zurich, Switzerland, January 2010.

C22. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. Detecting sequences of events and human actions in smart environments. Proceedings of the 1st RO-MAN 2009 International Workshop on "Context Awareness in Smart Environments: Background, Achievements and Challenges", Toyama, Japan, September 2009.

C21. F. Mastrogiovanni, A. Scalmato, A. Sgorbissa and R. Zaccaria. On situation specification in context-aware Robotics applications. Proceedings of the 4th European Conference on Mobile Robots (ECMR), Mlini / Dubrovnik, Croatia, September 2009. MA:C. *This paper has been selected for publication in an extended form in a Special Issue of the journal Automatika*.

C20. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. A model for the cooperation between robots and smart environments. Proceedings of the 4th IE 2009 International Workshop on "Artificial Intelligence Techniques for Ambient Intelligence", Barcelona, Spain, July 2009.

C19. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Context assessment strategies for ubiquitous robots. Proceedings of the 2009 IEEE International Conference on Robotics and Automation (ICRA), Kobe, Japan, May 2009. CORE:B, LiveSHINE:A++, MA:A++.

C18. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Understanding events spatially and temporally related: context assessment strategies for a smart home. Proceedings of the 2nd International Symposium on Universal Communication (ISUC), Osaka, Japan, December 2008. *Invited Paper*.

C17. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. A dependable situation assessment architecture for networked robots. Proceedings of the 2008 Nordic Workshop on Dependability and Security (NODES), Otepaa, Estonia, August 2008.

C16. F. Capezio, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Towards cognition in distributed systems. Proceedings of the 13th Conference of the Italian Association of Artificial Intelligence (AI*IA), Cagliari, Italy, September 2008. LiveSHINE:C, MA:C.

C15. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Representing and reasoning upon contexts in artificial systems. Proceedings of the 3rd ECAI 2008 Workshop on "Artificial Intelligence Techniques for Ambient Intelligence", Patras, Greece, July 2008.

C14. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. The more the better? A discussion about line features for self-localization. Proceedings of the 2007 IEEE-RSJ International Conference on Intelligent Robots and Systems (IROS), San Diego, CA, November 2007. CORE:A, LiveSHINE:A+, MA:A++.

C13. F. Capezio, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. The ANSER project: airport non-stop surveillance expert robot. Proceedings of the 2007 IEEE-RSJ International Conference on Intelligent Robots and Systems (IROS), San Diego, CA, November 2007. CORE:A, LiveSHINE:A+, MA:A++.

C12. F. Capezio, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. ANSER: airport night surveillance expert robot. Proceedings of the 6th IFAC Symposium on Intelligent Autonomous Vehicles (IAV), Tolouse, France, September 2007.

C11. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Extending the capabilities of mobile robots through knowledge ecosystems. Proceedings of the 7th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA), Jacksonville, Florida, June 2007. MA:C.

C10. F. Capezio, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. A distributed approach to knowledge representation for mobile robots in intelligent environments. Proceedings of the ICRA 2007 Workshop on "Omniscent Space", Rome, Italy, April 10, 2007.

C9. F. Capezio, F. Mastrogiovanni, A.Sgorbissa and R. Zaccaria. Towards a cognitive architecture for mobile robots in intelligent buildings. Proceedings of the ICRA 2007 Workshop on "Semantic Information in Robotics", Rome, Italy, April 2007.

C8. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. An active classification system for context representation and acquisition. Proceedings of the 2nd IJCAI 2007 Workshop on "Artificial Intelligence Techniques for Ambient Intelligence", Hyderabad, India, January 2007.

C7. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. A distributed architecture for symbolic data fusion. Proceedings of the 20th International Joint Conference on Artificial Intelligence (IJCAI), Hyderabad, India, January 2007. CORE:A++, LiveSHINE:A++, MA:A++.

C6. F. Capezio, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Fast position tracking of an autonomous vehicle in cluttered and dynamic indoor environments. Proceedings of the 8th International IFAC Symposium on Robot Control (SYROCO), Bologna, Italy, September 2006.

C5. F. Capezio, D. Femia, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. AE-Sim 2.0: a distributed simulator for intelligent spaces and robots. Proceedings of the 4th International Conference on Smart Homes and Health Telematics (ICOST), Belfast, Northern Ireland, UK, June 2006. CORE:C, MA:C.

C4. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Designing a system for map-based localization in dynamic environments. Proceedings of the 9th Conference on Intelligent Autonomous Systems (IAS), Tokyo, Japan, March 2006. *This paper has been selected for publication in an extended form in a Special Issue of the Journal of Robotics and Autonomous Systems.*

C3. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. On the tips of one's toes: self-localization in a dynamic environment. Proceedings of the 6th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA), Helsinki, Finland, June 2005. MA:C.

C2. F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. A system for hierarchical planning in service mobile Robotics. Proceedings of the 8th Conference on Intelligent Autonomous Systems (IAS), Amsterdam, The Netherlands, March 2004.

C1. M. Frixione, F. Mastrogiovanni, A. Sgorbissa and R. Zaccaria. Problem classification and solving in service Robotics. Proceedings from the 1st European Conference on Mobile Robotics (ECMR), Radziejowice, Poland, September 2003. MA:C.

Patents

P7. G. Crecco, F. Mastrogiovanni, C. Petagna, L. Sansone, L. Buoncompagni. Industrial process involving the reuse of 2D/3D models or drawings. IT 202200003836A1, IT (2022).

P6. D. Bertocci, C. Motolese, A. Scalmato, A. Sperindè, A. Giuni, F. Mastrogiovanni. Method and system for topological localization in a built environment. EP3943886A1, IT (2020), EP CA (2021).

P5. F. Mastrogiovanni, C. Terrore, P. Traverso. Equipment for detection and tracking of posture and/or deformation of a body organ. IT202000015322A1, IT (2020), CN EP US WO (2021).

P4. B. Bruno, A. Giuni, F. Mastrogiovanni, E. Reboscio, A. Scalmato, A. Sgorbissa. People monitoring and personal assistance system, in particular for elderly and people with special and cognitive needs. EP3410935B1, IT (2016), US CA EP WO CN (2017).

P3. R. Zaccaria, T. Vernazza, A. Sgorbissa, F. Mastrogiovanni, F. Capezio. A method and a device for determining the position of a vehicle for the autonomous driving of a vehicle, in particular a robotized vehicle. EP2278357A3, WO (2008).

P2. F. Mastrogiovanni, A. Sgorbissa, T. Vernazza, R. Zaccaria. Sensor and method device for detection of physical characteristics of a bidimensional and/or three-dimensional environment, in particular for the geographic location of a mobile robot. ITSV20060028A1, IT (2006).

P1. F. Capezio, F. Mastrogiovanni, A. Sgorbissa, T. Vernazza, R. Zaccaria. Method and device for recognizing the position of a vehicle for the autonomous driving of a vehicle, in particular of a robotic vehicle. ITSV20060026A1, IT (2006).

Genoa, March 24th, 2026.

Fulvio Mastrogiovanni