

Curriculum vitæ of

Antonio Paolillo

Senior Researcher

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Google Scholar: h-index = 15, 582 citations

Scopus: h-idex = 13, 410 citations Orcid: 0000-0001-5483-1254 Last update: November 27, 2024

BIOSKETCH

Antonio Paolillo was born in Salerno (Italy) on July 12, 1985 and grew up in Amalfi's coast. He received his Master's degree in Electronic Engineering and his Ph.D. in System Engineering from Sapienza University of Rome in 2011 and 2015, respectively. He is responsible for the activities in rehabilitation robotics and social human-robot interaction of the "Autonomous Robotics" research area at Dalle Molle Institute for Artificial Intelligence (IDSIA), USI-SUPSI, in Lugano (Switzerland) where he is a Senior Researcher since September 2024. From May 2020 to September 2024 he has been a Researcher at IDSIA. Previously, he has been a post-doc at EPFL, Lausanne, Switzerland (October 2019 - April 2020); Idiap Research Institute, Martigny, Switzerland (January 2018 - August 2019); CNRS-University of Montpellier, France (April 2015 - December 2017). He was a visiting researcher at the CNRS-AIST JRL of Tsukuba, Japan (April to November 2015); visiting scholar at CNRS-University of Montpellier, France (January - July 2014); visiting student at Örebro University, Sweden (May - December 2010). In June 2015, he participated in the DARPA Robotics Challenge Finals (Pomona, California) as a member of the AIST-NEDO team.

From 2023, he is an Associate Editor for IEEE Robotics and Automation Letters (RA-L). He has been an Associate Editor for the 21st International Conference on Ubiquitous Robots (UR 2024) and for the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) from 2021 to 2023. He has been the Chair of the 17th International Workshop on Human-Friendly Robotics (HFR 2024). He is a work package leader of the European project SERMAS and is involved in other Swiss projects.

His research aims to reduce the gap between people and robots, and his interests include human-robot interaction, robotic perception, humanoid and mobile robotics, robotic manipulation, sensor-based control, and visual servoing.

EDUCATION

Mar. 2015 Ph.D. in System Engineering from Sapienza University of Rome, Italy.

Jan. 2011 Master's degree in Electronic Engineering from Sapienza University of Rome, Italy.

Positions

Sep. 2024 - present Senior Researcher at Dalle Molle Institute for Artificial Intelligence (IDSIA), USI-SUPSI, Lugano, Switzerland.

May 2020 - Sep. 2024 Researcher at Dalle Molle Institute for Artificial Intelligence (IDSIA), USI-SUPSI, Lugano, Switzerland.

Oct. 2019 - Apr. 2020 Post-doc researcher at École Polytechnique Fédérale de Lausanne (EPFL), Laboratory of Intelligent Systems, Switzerland.

- Jan. 2018 Aug. 2019 Post-doc researcher at Idiap Research Institute, Martigny, Switzerland.
- **Apr. 2015 Dec. 2017** Post-doc researcher at Laboratoire d'Informatique de Robotique et de Microélectronique de Montpellier (LIRMM), CNRS/University of Montpellier, France.
- Dec. 2014 Mar. 2015 Researcher at Robotics Laboratory, Dipartimento di Informatica e Sistemistica (DIS), Sapienza University of Rome, Italy
- Nov. 2011 Nov. 2014 PhD student in System Engineering at Robotics Lab of Dipartimento di Ingegneria Informatica, Automatica e Gestionale (DIAG), Sapienza University of Rome, Italy.
- Mar. 2011 Oct. 2011 Research collaborator at Robotics Laboratory, Dipartimento di Informatica e Sistemistica (DIS, now DIAG), Sapienza University of Rome, Italy.

VISITS

- Apr. 2015 Nov. 2015 Visiting researcher at the CNRS-AIST Joint Robotics Lab (JRL), Tsukuba, Japan.
- **Jan. 2014 Jul. 2014** Visiting researcher at Laboratoire d'Informatique de Robotique et de Microélectronique de Montpellier (LIRMM), CNRS/University of Montpellier, France.
- May 2010 Dec. 2010 Visiting student at Mobile Robotics and Olfaction Lab of the Centre for Applied Autonomous Sensor Systems (AASS) laboratories of the Örebro University, Sweden.

TEACHING ACTIVITIES

- 2024 Exercise class in the course of Data Science, held by Prof. Giusti at SUPSI, Bachelor in Informatics, 21 students.
- 2021-present "Visual servoing", Seminar at USI Robotics course taken by Prof. A. Giusti, Lugano, Switzerland.
- Aug. 25, 2021 "Visual servoing for navigation and manipulation", Lecture at the GMAR Summer School, Innsbruck, Austria.

SCIENTIFIC ACTIVITIES

RESPONSIBILITY ROLE IN RESEARCH GROUPS

- Sep. 2024 Co-applicant, Data Booster, 20 000 CHF.
- Jul. 2024 Recipient of an SNFS Scientific Exchanges grant (grant number: IZSEZ0_229813).
- Jul. 2023 Co-applicant, ViSENSy: Visual Servoing for Embedded Nano-drone Systems, funded by Hasler Foundation, 50 000 CHF.
- Sep. 2022 Co-applicant, Voucher for project writing, granted by SUPSI, 10 000 CHF.
- May 2020 Applicant and Principal Investigator of Virtual Reality and Hand Exoskeleton for Mirror Therapy: a Feasibility Study (VRHEM), funded by Swiss Innovation Council (Innolink: 100.533 IP-ICT, link), 193 780 CHF.
- Oct. 2022 present Work Package Leader, Socially-acceptable Extended Reality Models and Systems (SERMAS), funded by the European Commission (Grant agreement ID: 101070351, link), overall budget € 4 444 228,75.

- Jun. 2021 Applicant and Principal Investigator, Efficient Vision-based Robotic Control (EViRCo), funded by Hasler Foundation, 47 040 CHF.
- **2021** Applicant of Swiss-European Mobility Program (SEMP), grant for training activities with European partner in 2021/2022.

SOCIETY SERVICE, MEMBERSHIP & QUALIFICATIONS

- Oct. 2024 General chair, 17th International Workshop on Human-Friendly Robotics (HFR 2024), Lugano, Switzerland (link).
- Oct. 2024 present IEEE Senior Member.
- Jun. 2024 Italian National Scientific qualification as associate professor in the Italian higher education system for the disciplinary field of System and control engineering (09/G1), Information processing systems (09/H1), and Informatics (01/B1).
- Mar. 2024 Co-organizer and chair of the Insight Session, "Fostering Socially Acceptable Robotics and Extended Reality (XR)," workshop at European Robotics Forum, Rimini, Italy. (link).
- Jan. 2019 Main organizer, MEMMO Winter School, Martigny, Switzerland (link).
- 2016 Program committee member of the 2016 IEEE/SICE International Symposium on System Integration.
- **Nov. 2016** Corresponding organizer, "The use of dynamics in the field of humanoid robots: identification, planning, perception and control," workshop at the 2016 IEEE-RAS International Conference on Humanoid Robots, Cancun, Mexico, 2016.

EDITORIAL SERVICE

- 2023-present Associate Editor for the IEEE Robotics and Automation Letters (RA-L).
- 2024 Associate Editor for the 21st International Conference on Ubiquitous Robots (UR 2024).
- 2021-2023 Associate Editor for the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).
- 2022 Reviewer of the PhD thesis "Optimization-Based Methods for Real-Time Generation of Safe Motions in Mobile Robots," Spyridon G. Tarantos, Sapienza University of Rome.
- 2012-present Reviewer of journal and conference papers: Internation Journal of Robotics Research (IJRR); IEEE Robotics & Automation Magazine (RAM); IEEE Robotics and Automation Letters (RA-L); Journal of Computer Vision and Image Understanding (CVIU); IEEE International Conference on Robotics and Automation (ICRA); IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS); International Conference on Advanced Robotics (ICAR); IEEE-RAS International Conference on Humanoid Robots (Humanoids); IEEE/SICE International Symposium on System Integration (SII); CIRP Conference on Manufacturing Systems (CMS); Human-Friendly Robotics (HFR).

AWARDS

- Nov. 2023 Recipient of the "Quality of Life" label, awarded by Fondation Dalle Molle Pour La Qualité de la Vie, for the project REMiT (Remotely-assisted Enhanced Mirror Therapy A case study for the future of telemedicine), 3333 CHF.
- **Aug. 2017** Co-author, best student paper award at the 13th IEEE Conference on Automation Science and Engineering (link).

TALKS AND SEMINARS

- Sep. 17, 2024 "Intelligenza artificiale nella collaborazione e interazione tra uomo e robot", Action Day, Lugano, Switzeralnd (link).
- Jul. 8, 2024 "AI-powered Perception for Social Robots", University of Trento, Italy (link).
- Sep. 28, 2022 "Dynamical Systems-based Imitation Learning for Visual Servoing", Talk at KUKA AG, Virtual.
- Dec. 20, 2019 "Vision-based robotic localization, navigation and interaction", talk at IDSIA, Lugano, Switzerland.
- Dec. 12, 2019 "Localize, navigate, interact: the humanoid robotics experience", talk at the robotics group of CERN, Genève, Switzerland.
- May 15, 2019 "Closed-loop robotic manipulation of articulated objects", talk at Larsen group, INRIA, Nancy, France.
- **Jun. 20, 2017** "Humanoid robot driving a car autonomously: a sensor-based approach", talk at the Journeés Nationales de la Robotique Humanoïde, Montpellier, France.
- Oct. 27, 2016 "Vision-based control algorithms for humanoids performing everyday tasks", talk at IRCAD, University of Strasbourg, France.
- Oct. 26, 2016 "Vision-based control algorithms for humanoids performing everyday tasks.", talk at the Humanoid Robots Lab, University of Bonn, Germany.
- Aug. 28, 2015 "Vision-based control of humanoid robots interacting with the real world", talk at GVLab, Tokyo University of Agriculture and Technology, Japan.

PUBLICATIONS

See the complete list of my publications on the Publications page of my webpage.

OUTREACH

- Jan. 21, 2024 "Così l'intelligenza artificiale aiuta i robot a capire gli stati d'animo degli esseri umani", Ticino Scienza.
- Apr. 30, 2023 "Riabilitazione virtuale", Interview at the RSI TV broadcast "Il Giardino di Hilbert".
- Apr. 15, 2022 "Study Ranks Jobs Threatened by Robots—and Offers Robot-Safe Options", by Abigail Eisenstadt, aaas.org.
- Dec. 11, 2014 "El futuro robot conductor", by Ángel Luis Sucasas, El País.