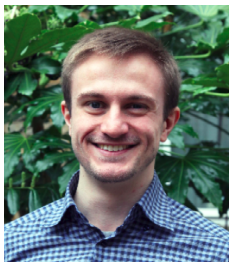
Francesco Semeraro



Research interests

Human-Robot Collaboration, Human-Robot Interaction, Robotics, Deep learning, Reinforcement learning, Affective Computing

Qualifications

Master of Science, Robotics and Computation, University College London (UCL)
15 Sept 2018 → 2 Sept 2019
Award Date: 13 Nov 2020

Master of Science, Bionics Engineering, Scuola Superiore Sant'Anna The BioRobotics Institute
21 Sept 2015 → 3 May 2018
Award Date: 3 May 2018

Bachelor of Science, Electronic Engineering, Universita di Pisa
24 Sept 2012 → 22 Sept 2015
Award Date: 24 Sept 2015

Employment

Robotics Engineer

Fieldwork Robotics Ltd.
United Kingdom
20 Jan 2020 → 18 Sept 2020

Automation Engineer

Aidrivers Ltd.
United Kingdom
15 Oct 2018 → 8 Nov 2019

Researcher

Scuola Superiore Sant'Anna The BioRobotics Institute
Pisa, Italy
1 Jun 2018 → 30 Sept 2018

Prizes

1st Prize as Young Researcher

Semeraro, F. (Recipient), 2 Jul 2018

1st Prize in Engineers in Business Competition

Varasteh Kia, G. (Recipient), Semeraro, F. (Recipient), Podder, S. (Recipient) & Baron, L. (Recipient), Jun 2019

RPL Summer School 2022

Semeraro, F. (Recipient), 19 Apr 2022

UKRI EPSRC/BAE Systems plc. DTP CASE-conversion "Human-Robot Collaboration for Flexible Manufacturing"

Semeraro, F. (Recipient), 1 Jun 2020

"Vincenzo Tagliasco" Prize
Semeraro, F. (Recipient), 12 Sept 2018

Workshop on Research Environments for Human-Machine Teaming
Semeraro, F. (Recipient), 30 Apr 2024

Research outputs

Robustness to Object Occlusions in Human-Robot Collaborative Assembly Using Compact Prediction Trees
Semeraro, F., Pilato, G. & Cangelosi, A., 2 Sept 2025, *2025 IEEE International Conference on Robot and Human Interactive Communication (RO-MAN).* IEEE

TriHRCBot: A Robotic Architecture for Triadic Human-Robot Collaboration through Mediated Object Alignment
Semeraro, F., Leadbetter, J. & Cangelosi, A., 2 Sept 2025, *2025 IEEE International Conference on Robotics and Automation (ICRA) May 19-23, 2025, Atlanta, USA.*

Human-Centred Robotics and AI for Trustworthy Human-Robot Interaction
Cangelosi, A., Adikari, M., Maharjan, R. S., Raggioli, L., Semeraro, F., Stoican, R., Tavella, F., Zhu, H. & Romeo, M., 27 Aug 2025, *Technology as Cultural Mediator: Theories and Experiences from Different Contexts.* Ligorio, M. B. (ed.). Cham: Springer Cham, p. 191–222 32 p. (Culture in Policy Making: The Symbolic Universes of Social Action).

Good Things Come in Threes: The Impact of Robot Responsiveness on Workload and Trust in Multi-User Human-Robot Collaboration
Semeraro, F., Carberry , J., Leadbetter, J. & Cangelosi, A., 25 Dec 2024, (E-pub ahead of print) *2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).*

Computational Trust in Robotics: Preliminary Investigations and Evidence
Semeraro, F., Romeo, M., Cangelosi, A. & Vinanzi, S., 15 Nov 2024, (E-pub ahead of print) *Third International Conference on Hybrid Human-Artificial Intelligence (HHAI 2024): MultiTTrust, 3rd Workshop on Multidisciplinary Perspectives on Human-AI Team Trust.* CEUR Workshop Proceedings, Vol. 3825. p. 176-179

Towards Multi-User Activity Recognition through Facilitated Training Data and Deep Learning for Human-Robot Collaboration Applications
Semeraro, F., Carberry , J. & Cangelosi, A., 2 Aug 2023, *International Joint Conference on Neural Networks (IJCNN 2023).*

Simpler rather than Challenging: Design of Non-Dyadic Human-Robot Collaboration to Mediate Human-Human Concurrent Tasks
Semeraro, F., Carberry , J. & Cangelosi, A., 30 May 2023, *22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2023), London.* Association for Computing Machinery