



Sara Mongile

Home :

Email: Email: Phone:

Gender: Date of birth: 25/05/1996 Nationality:

EDUCATION AND TRAINING

[01/11/2021 – Current]

PhD Student at CONTACT Unit

University of Genoa, Italian Institute of Technology

City: Genoa | Country: Italy |

Supervisors: A. Sciutti, F. Rea, A. Tanevska

PhD project focuses on studying human adaptation mechanisms and how to model them to enhance human-robot interaction. Development of a hormonal-inspired internal motivation to drive the robot behavior in a more autonomous and adaptive way.

[18/03/2024 – 30/06/2024]

Visiting Scholar at Interaction Lab (MACS)

Heriot-Watt University, National Robotarium

City: Edinburgh | Country: United Kingdom |

Supervisor: Prof. Marta Romeo

The visiting research project focuses on completing work on "Enhancing Human-Robot Interaction through Adaptive Transparency" developing and running a human-robot interaction experiment using the HSR platform from Toyota. The research aims to investigate how a comfort-driven robot affects transparency during a collaborative task and how it influences human collaborators' decisions.

[15/09/2018 – 30/03/2021]

Master Degree in Bioengineering - Neuroengineering and bio-ICT

University of Genoa, DIBRIS

City: Genoa | Country: Italy | | Final grade: 110/110 | Thesis: Human cortical neurons derived from induced pluripotent stem cells on microelectrode arrays: characterization of electrophysiological activity.

[25/09/2015 – 25/09/2018]

Bachelor's Degree in Biomedical Engineering

University of Cagliari

City: Cagliari | Country: Italy | | Final grade: 109/110 | Thesis: Fabrication and characterization of tattoo-electrodes for acquisition of electrocardiographic signals (ECG).

Authorization to practice as Information Engineer (Section A, Italy)

University of Genoa

Country: Italy |

Participation to 8th Neuroengineering School "Massimo Grattarola" 2022

University of Genoa

Participation to Machine Learning Crash Course 2022

University of Genoa, MaLGa and DIBRIS

WORK EXPERIENCE

[01/05/2021 – 31/10/2021]

Internship at CONTACT Unit

Italian Institute of Technology (IIT)

City: Genoa | **Country:** Italy

Internship at **COgNiTive Architecture** for **Collaborative Technologies** unit, in IIT.

Aim: Research into related works on trust and adaptation in social interaction, social norms, existing approaches to computationally modeling social processes, and existing experimental research in social adaptation in human-human or human-robot interaction. Collaboration in designing and implementing a model for an adaptation framework, validation of the framework, potential collections, and analysis of experimental data from interaction studies with participants.

[01/05/2020 – 20/12/2020]

Internship at the laboratory BIOLAB, Unige

University of Genoa

City: Genoa | **Country:** Italy

Internship for thesis purpose of the Master in Bioengineering in the BioLab Laboratory, at DIBRIS, Unige.

Aim: Realization of a protocol for the characterization of a 2D neuronal culture derived from h-iPSCs. Experience with the characterization of the electrophysiological network activity of a neuronal culture in the realization of a protocol for analysis and software configuration, signal recording (using Multi-Channel System package), analysis of electrophysiological activity (study of spontaneous activity and after stimulation), and data processing using MATLAB software.

[02/02/2018 – 30/08/2018]

Internship in the laboratory DEALAB, Unica

University of Cagliari

City: Cagliari | **Country:** Italy

Internship with the purpose of Thesis for the Bachelor in Biomedical Engineering in the DeaLab laboratory, at DIEE, Unica.

Aim: Realization of silver electrodes on PEN and PET substrates and realization of silver tattoo electrodes on nanofilm. The experience aimed at familiarizing the laboratory tools (thermal evaporator, parylen coater, spin coater, photolithography system and profilometer, 3D printer) for the realization and characterization of electrodes and the data processing using MATLAB software.

[01/09/2017 – 15/11/2017]

Laboratory of Motion Analysis, Unica

University of Cagliari

City: Cagliari | **Country:** Italy

Aim: Motion analysis with gait segmentation and electromyographic activity monitoring. Use of tools such as markers with high-resolution cameras, baropodometric platforms, electrodes, and EMG instruments.

[01/11/2017 – 20/02/2018]

Activity of Collaborator Student

University library in Cagliari

City: Cagliari | **Country:** Italy

The activity of collaborator student at the Engineering University of Cagliari involved the reception in the library, book lending and restitution service.

[01/06/2022 – 30/06/2024]

Tutor in "Progetto Matricole"

University of Genoa

City: Genoa | **Country:** Italy

Teaching Mathematical Analysis as an educational tutor for *Progetto Matricole* at UniGe

[01/07/2024 – Current]

Tutor for "Progetto di Inglese" at UniGe

University of Genoa

Country: Italy

Accompany students in their English learning path, answering their questions and giving advice on their study method.

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

My Digital Skills

Programming Languages C C++ Python Matlab | YARP | Microsoft Office (Word Excel PowerPoint Outlook) | ROS(robot operating system)

Communication, management and organizational skills

Team-work oriented | Decision-making | Organizational and planning skills | Good listener and communicator | Responsibility | Problem-solving | flexible | Critical thinking | Ability to Work Under Pressure | Friendly | Communications

DRIVING LICENCE

Motorbikes: A1

Cars: B

PUBLICATIONS

- [2023] [**What if a Social Robot Excluded You?: Using a Conversational Game to Study Social Exclusion in Teen-robot Mixed Groups**](#)
- Reference:** S. Mongile, G. Pusceddu, F. Cocchella, L. Lastrico, G. Belgiovine, A. Tanevska, F. Rea, A. Sciutti
- Proceedings of the 2023 ACM/IEEE International Conference on Human-Robot Interaction. 2023.
- Link:** <https://www.youtube.com/watch?v=AHbJ7rT0vhc&t=26s>
- [2022] [**Validating a Cortisol-Inspired Framework for Human-Robot Interaction with a Replication of the Still Face Paradigm.**](#)
- Reference:** S.Mongile. A.Tanevska, F. Rea, A. Sciutti.
- Proceedings of the 2022 IEEE International Conference on Development and Learning 2022
- [2022] [**Are Robots Able to Assess Their Partners' Attachment Style Better At Adaptive Autonomous Behavior?**](#)
- Reference:** S.Mongile. A.Tanevska, F. Rea, A. Sciutti.

Proceedings of the 2022 ACM/IEEE International Conference on Human-Robot Interaction. 2022.

Link: <https://www.youtube.com/watch?v=l6WyTBk9hMw&t=20s>

[2023] **A Conversational Game to Study Social Influence in Humans-Robot Interactions**

Reference: S. Mongile, G. Pusceddu, F. Cocchella, L. Lastrico, G. Belgiovine, A. Tanevska, F. Rea, A. Sciutti

Extended Abstract at the International Conference on Child-Robot Interaction. 2023

HONOURS AND AWARDS

[18/04/2024]

Winner for the call "Trustworthy Artificial Intelligence – Short Stay Exchange Program for Researchers Italy-UK" promoted by FAIR

Awarding institution: FAIR

Presented a research proposal titled "*Enhancing Human-Robot Interaction through Adaptive Transparency*," selected as a winner for the call "Trustworthy Artificial Intelligence – Short Stay Exchange Program for Researchers Italy-UK."

[10/03/2023]

Finalist for Best Late Breaking Report at the International Conference on Human-Robot Interaction

Title of the article: "What if a Social Robot Excluded You? Using a Conversational Game to Study Social Exclusion in Teen-robot Mixed Groups"

[26/01/2020]

Scholarship recipient - Erasmus + Awarding institution: Erasmus +

Scholarship to pursue my thesis work in Belgium. Due to Covid-19, I did not leave

PROJECTS

"Il robot che vorrei"

Interactive activities proposed and presented at "Città dei Bambini e dei Ragazzi, Genova"

"Pattern! Di neuroni, madeleine, geoni e robot esploratori"

"Impressi nella mente di un robot" – Activity with iCub at Festival della Scienza Genova