Sara Gomiero

Mother tongue(s): Italian

EDUCATION
Doctoral studies

PhD Student in Autonomous Systems (DAuSY National PhD programme)
Politecnico di Bari, Free University of Bozen-Bolzano
Start (11-2023) – currently pursuing
Supervisor: Prof. Karl von Ellenrieder
Project: Robust and safe control of cargo drones

Graduate studies

MSc Student in Control Systems Engineering
University of Padova
Start (09-2021) – End (09-2023)
Final Grade: 110/110 cum Laude
Final Degree Project: Sampling-based synthesis of controllers for coupled agents under Signal Temporal Logic specifications
Supervisor: Prof. Angelo Cenedese (Unipd), Prof. Dimos Dimarogonas (KTH)

Undergraduate studies

First level degree in Ingegneria dell'Informazione
University of Padova
Start (09-2018) – End (07-2021)
Final Grade: 110/110 cum Laude
Final Degree Project: Local community detection in multi-layer networks
Supervisor: Prof. Tomaso Erseghe

High School

High School Diploma in Liceo Scientifico Ippolito Nievo, Padova (PD), Italy
Start (09-2013) – End (07-2018)
Grade: 100/100 cum Laude

OTHER RELEVANT EDUCATIONAL EXPERIENCES

Erasmus + Studio

Hosting institution: Royal Institute of Technology (KTH), Stockholm, Sweden

Start (02-2023) – End (07-2023)

Programme: Research for the final degree project in the department of Electrical Engineering and Computer Science and in the Smart Mobility Lab

RELEVANT PROFESSIONAL EXPERIENCES

Teaching assistant for Fundamentals of Information Science and Microcontroller Programming

Employer's name and address: Faculty of Engineering, Free University of Bozen-Bolzano, Bruno-Buozzi-Straße 1 -Via Bruno Buozzi 1, Bolzano (BZ)

Start (10-2024) – End (02-2025)

Main responsibilities: Assistance during the lab sessions (total amount of hours: 36).

Tutor Buddy for international students

Employer's name and address: Department of Information Engineering of the University of Padova, Via Gradenigo 6/b, Padova (PD)

Start (09-2022) – End (02-2023)

Main responsibilities: Supporting a group of 25 international students in administrative procedures, answering their questions and helping them integrating in the city and university (total amount of hours: 50).

Tutor junior for calculus 1

Employer's name and address: Department of Information Engineering of the University of Padova, Via Gradenigo 6/b, Padova (PD)

Start (09-2022) – End (01-2023)

Main responsibilities: Solving exercises related to the course of calculus 1 for the students enrolled in the first year of the bachelor degree in Aerospatial Enginnering. Supporting and answering to doubts via email (total amount of hours: 50).

Tutor junior for calculus 1

Employer's name and address: Department of Information Engineering of the University of Padova, Via Gradenigo 6/b, Padova (PD)

Start (09-2021) – End (01-2022)

Main responsibilities: Solving online exercises related to the course of calculus 1 for the students enrolled in the first year of the bachelor degree in Aerospatial Enginnering. Supporting and answering to doubts via email (total amount of hours: 50).

PERSONAL SKILLS

English

UNDERSTANDING		SPEAKING		WRITING
Listening	**Reading**	**Spoken interaction**	**Spoken production**	
C1	C1	C1	C1	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Certificate: Cambridge B2 test obtained in 2017

Other known language(s)

Spanish: understanding and speaking level C1, writing level B2

Certificate: C1 certificate obtained in 2019 during a 2-week intensive course of Spanish in Barcelona

Computer skills

Advanced: Use of Matlab and Simulink, Microsoft Office tools, Latex

Intermediate: Use of Python and Jupiter Notebook, C++

Basic: Use of Java, Arduino

Licences

B driving license in Italy (from 2017)
A1/A3 and A2 drone licenses, Drone Class (from 2024)

ADDITIONAL INFORMATION

Awards

"Mille e una lode" merit-based award offered by the University of Padova, November 2020 (acceptance rate: 3%)

"Mille e una lode" merit-based award offered by the University of Padova, November 2022 (acceptance rate: 3%)

PUBLICATIONS

International Conferences

S. Gomiero and K. von Ellenrieder, Chattering-free sliding mode control for position and attitude tracking of a quadrotor, CoDIT 2024*

S. Gomiero and K. von Ellenrieder, Chattering-free sliding mode control for position and attitude tracking of a quadrotor with a cable-suspended load, CASE 2024**

*An extended abstract based on this work was presented during the 3rd International Symposium on Industrial Engineering and Automation (ISIEA 2024), 19-21 June 2024, Bolzano (Italy). The paper was presented during the 10th International Conference on Control, Decision and Information Technology (CoDIT 2024), 1-4 July 2024, La Valletta (Malta)

**The paper has also been selected as a finalist for the Best application paper award. It will be presented during the 20th International Conference on Automation Science and Engineering (CASE 2024), 28 August – 1 September 2024, Bari (Italy). An abstract based on this work will be presented during the Automatica.it 2024, 11-13 September 2024, Bolzano (Italy)