

PERSONAL INFORMATION

Alessandro Bozzi

Permanent address Via Barrili 6/8, Genova 16143, Italy

Work address Via Opera Pia 13, Genova 16145, Italy

Date of birth 6 March 1996 | **Nationality** Italian

EDUCATION

02 November 2023 - in progress **Postdoctoral Research Fellow in Systems Engineering at University of Genoa, Italy**

01 May 2022 - 13 December 2023 **Joint double PhD at Université Savoie Mont Blanc, Annecy (France)**
Project Challenges and opportunities of a platooning-based method on distributed production systems.

01 November 2020 - 13 December 2023 **PhD in Systems Engineering at University of Genoa, Italy**
Research field Control of vehicle platooning, system of systems analysis and control, integration of platooning-based control techniques in smart manufacturing systems

September 2018 – October 2020 **Master's degree in Computer Engineering: Networked Control Systems**
Master's thesis Optimal and robust control of agent teams: control algorithms for path planning of autonomous vehicles platooning, with independent system to handle emergency situations.
Final mark 110/110 with honors

September 2019 – October 2020 **European Master in Engineering for Complex and Interacting Systems**
Double joint degree between University of Genoa (Italy) and University of Technology of Compiègne (Sorbonne University, France), specialty Automation and Robotic of Intelligent Systems

September 2015– September 2018 **Bachelor's degree in Computer Engineering**
Bachelor's thesis FillField: Android app with the aim of automating the reservation of soccer fields, with geolocalization services and real-time database to handle concurrent bookings.
Final mark 106/110

TRAINING EXPERIENCES

7-9 June 2023 **Organizer of the first Albanian-Italian Summer School**
Organization and development of the Summer School for bachelor students held in Tirana (Albania), with theoretical and practical lesson to initiate students to systems engineering problems

16-21 September 2021 and 12-16 September 2022 **Organizer of SysE2021 Interreg-Alcotra Summer Schools**
Organization and development of the SysE2021 Summer School held in Imperia (Italy), consisting in a Hackathon between undergraduate students about topics of systems engineering, funded by the Interreg-Alcotra Program

March-June 2019 **On-Board application**
Software developed for Abirk Italia S.r.l. to allow the communication through IoT-based sensing of one or more remote devices with a centralized server in order to perform real-time monitoring and diagnostics.

PUBLICATIONS

- 2023 **Dynamic MPC-based scheduling in a smart manufacturing system problem**
IEEE Access Bozzi A., Graffione S., Sacile R. & Zero E.
- 2023 **Platoon-based Distributed Control for Automated Material Handling Systems**
CODIT2023 Bozzi A., Graffione S., Kockelkoren M., Sacile R. & Zero E.
- 2023 **Path Tracking for Wheeled Mobile Robot using Non Linear Model Predictive Control in Indoor Environment**
CODIT2023 Bozzi A., Graffione S., Jimenez J., Sacile R. & Zero E.
- 2023 **Reliability Evaluation of Emergent Behaviour in a Flexible Manufacturing Problem**
SOSE2023 Bozzi A., Graffione S., Jimenez J., Sacile R. & Zero E.
- 2023 **Distributed Control of a System of Systems: An Alternating Direction Method of Multipliers Approach**
SOSE2023 Bozzi A., Graffione S., Sacile R. & Zero E.
- 2023 **An Improved Dual Quaternion-based Dynamic Movement Primitives Formulation for Obstacle Avoidance Kinematics in Human-Robot Collaboration System of Systems**
SOSE2023 Liendo F., Bozzi A., Hernandez C., Galez C., Sacile R. & Jimenez J.
- 2022 **Design and Implementation of an Asynchronous Finite State Controller for Wheeled Mobile Robots**
Actuators Bozzi A., Graffione S., Sacile R. & Zero E.
- 2022 **A hierarchical control scheme to improve the travel performance of truck platoons in freeways**
ITSC2022 Bozzi A., Graffione S., Pasquale C., Sacile R., Sacone S. & Siri S.
- 2022 **Controlling decisions by head electrical signals**
SysInt2022 Zero E., Bozzi A., Graffione S. & Sacile R.
- 2022 **Proportional integral derivative distributed control vs linear quadratic tracking regulator in vehicle overtaking within a platoon**
ICINCO2022 Bozzi A., Sacile R. & Zero E.
- 2021 **Real-time Robust Trajectory Control for Vehicle Platoons: A Linear Matrix Inequality-based Approach.**
ICINCO2021 Bozzi A., Zero E., Sacile R., & Bersani C.

TEACHING ACTIVITIES

April 2023 - July 2023 **Professor at Université Savoie Mont Blanc (Annecy, France)**

Courses: Embedded control, Multiphysics – Hours of teaching: 25

May 2022 - December 2022 **Professor for RINA company (Annecy, France)**

Courses: Physics, Electromagnetic fields – Hours of teaching: 80

January 2021 - February 2021 **Professor at ITS La Spezia (La Spezia, Italy)**

Courses: Database Management Systems, Web Programming – Hours of teaching: 28

OTHER EXPERIENCES

May 2021 - in progress **Associate editor for the IEEE Intelligent Transportation Systems Society.**

COMPETENCES AND SKILLS

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	C1	B2	B2
Common European Framework of Reference for Languages (CEFR): B2 Estimated level: C1					
French	B2	B2	B2	B1	B1
Common European Framework of Reference for Languages (CEFR): B1 Estimated level: B2					

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Technical skills

- Systems control and automation: robust control, linear quadratic controller
- Systems engineering and system of systems problems
- Optimization
- Programming: Matlab, Python, C++
- Hardware: Rasperry, Arduino
- Mobile and web development (basic experience): Android, Java, HTML, PHP

Personal skills

- Ability to carry out the task independently while meeting deadlines
- Competence in teamwork and in collaborative projects
- Problem solving skills
- Responsibility and work organization

Driving license B1

Autorizzo il trattamento dei dati personali presenti nel curriculum vitae ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 e del GDPR (Regolamento UE 2016/679).

Genova,
February 2, 2024