

## Contatta

[www.linkedin.com/in/lorenzo-pichierri](https://www.linkedin.com/in/lorenzo-pichierri) (LinkedIn)

## Competenze principali

Technical Project Leadership  
Public speaking  
Time management

## Certifications

Lifeguard Licence  
IELTS (7.5)  
Professional Engineer License

# Lorenzo Pichierri

Robotic Software Engineer @ ARX Robotics | PhD in Multirobot Coordination @ UniBO  
Monaco di Baviera, Baviera, Germania

## Riepilogo

Robotics researcher specialized in optimizing multi-robot cooperation, autonomous navigation, SLAM. Extensive experience in ROS 2, real-world deployments, and optimization-based solutions for ground, aerial, and submarine robots. Proven ability in public communication, industry collaborations, project leadership, and software development for perception, path planning, and fleet coordination.

Beyond research, I enjoy outdoor activities, particularly wild camping and mountain biking.

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## Esperienza

ARX Robotics  
Robotic Software Engineer  
settembre 2025 - Present (4 mesi)  
Monaco di Baviera, Baviera, Germania

Alma Mater Studiorum - Università di Bologna  
4 anni

Postdoctoral Researcher  
novembre 2024 - settembre 2025 (11 mesi)  
Bologna, Emilia Romagna, Italia

- Developing tools for distributed optimization in multi-robot systems.
- Designing decision-making algorithms for autonomous mobile robot (AMR) fleet management

Teaching Assistant  
settembre 2022 - settembre 2025 (3 anni 1 mese)  
Bologna, Emilia Romagna, Italia

Teaching assistant for the course "Automazione dei Processi Industriali" of the Master Degree in Management Engineering held by professor Ivano Notarnicola

## Teaching Assistant

febbraio 2022 - settembre 2025 (3 anni 8 mesi)

Bologna, Emilia Romagna, Italia

Teaching assistant for the course "Distributed Autonomous Systems" of the Master Degree in Automation Engineering held by professor Giuseppe Notarstefano

## Doctoral Researcher

ottobre 2021 - novembre 2024 (3 anni 2 mesi)

Bologna, Emilia Romagna, Italia

- Designed ROS 2-based multi-robot platforms enabling distributed computing and mixed-reality experiments.
- Proposed novel distributed optimization strategies for heterogeneous, event-triggered multi-robot applications.
- Deployed plug-and-play robotic solutions for environmental monitoring, target encirclement, and underwater surveillance.
- Organized a workshop on aerial swarms toolboxes at the Robotics: Science and Systems Conf. on July 19, 2024 (20+ attendees).
- Member of Joint Academic Committee.

## Norwegian University of Science and Technology (NTNU)

### Visiting Researcher

marzo 2024 - agosto 2024 (6 mesi)

Trondheim, Norvegia

- Developed distributed multi-robot underwater monitoring strategies.
- Led mixed-real underwater surveillance field tests.

## OPT4SMART

8 mesi

### Workshop Organizer

gennaio 2024 - luglio 2024 (7 mesi)

I was an active member of the organizing committee for the workshop "Aerial Swarm Tools and Applications", held during the Robotics: Science and Systems Conference in Delft, Netherlands.

The workshop focused on the management of aerial robotic swarms, providing participants with an introduction to major swarm tools, including Skybrush, CrazyChoir, Aerostack2, and Crazyswarm2 (all based on ROS 2).

We delivered tutorials designed to help researchers understand the capabilities of these tools and guide them through the initial steps of using

them for aerial swarm validation in both simulations and physical robot deployments.

Additionally, the workshop featured talks from leading experts in academia and industry, including representatives from the Technical University of Munich, Czech Technical University, University of Bristol, and CollMot Entertainment. These presentations highlighted real-world applications of aerial swarms and addressed the practical challenges of swarm management.

#### Workshop Organizer

dicembre 2023 - marzo 2024 (4 mesi)

Bologna, Emilia Romagna, Italia

I was an active member of the organizing committee for the workshop 'Cooperative Autonomous Robots in Research and Industry,' hosted by euRobotics at the European Robotics Forum 2024 in Rimini, Italy.

The workshop aimed to foster interaction between researchers in mobile robotics and technology providers in the field of AMRs. We welcomed speakers from Amazon, Leonardo, Bosch, and Centro di Ricerca "E. Piaggio".

#### IMA Group

Software PLC Engineer

novembre 2018 - agosto 2019 (10 mesi)

Bologna Area, Italy

#### Marchesini Group S.p.A.

Graduation Internship

febbraio 2018 - giugno 2018 (5 mesi)

Bologna, Italia

#### Tayga Beach

Lifeguard

maggio 2015 - settembre 2015 (5 mesi)

Campomarino, Taranto, Italy

#### Punto Elettrico

Seller

2008 - 2015 (7 anni)

Sava (Taranto), Italy

## Formazione

Alma Mater Studiorum - Università di Bologna

Doctor of Philosophy - PhD, System Engineering, Cooperative Multi-Robot Systems · (novembre 2021 - marzo 2025)

Alma Mater Studiorum – Università di Bologna

Master of Science - MS, Mechatronics, Robotics, and Automation Engineering · (2019 - 2021)

Alma Mater Studiorum – Università di Bologna

Bachelor of Science - BS, Mechatronics, Robotics, and Automation Engineering · (2015 - 2018)

ITIS Oreste del Prete - Sava(TA), Italy

High School Diploma, Electrical and Electronics · (2010 - 2015)