Davide Valenti

Personal Details

Affiliation:	Department of Electrical, Electronic and Information Engineering "G. Marconi", Alma Mater Studiorum Università di Bologna, viale del Risorgimento 2, 40136, Bologna, Italy
Email:	d.valenti@unibo.it
Date of Birth:	December 28, 2000

Current Position

1 Nov 2024 – current | Ph.D. Student in Biomedical, Electrical and System Engineering
Curriculum: Automatics and Operations Research
Assigned Topic: Methods and tools of control and optimization for autonomous mobile robots.
Supervisor: G. Notarstefano, *Co-supervisor:* V. Digani
Affiliation: Department of Electrical, Electronic and Information Engineering "G. Marconi", Alma Mater Studiorum Università di Bologna, Italy

Education

7 Oct 2024 | Master's degree in Automation Engineering (LM-25), Alma Mater Studiorum Università di Bologna, Italy
110/110 cum laude
Advisor: G. Notarstefano
Thesis: Optimal control based maneuvering for virtual vehicle prototypes.

5 Oct 2022 | Bachelor's degree in Automation Engineering (L-8), Alma Mater Studiorum Università di Bologna, Italy
110/110 cum laude
Advisor: M. Mengoni
Thesis: Position Control of a Permanent Magnet Synchronous Motor.

Positions Held

2024 – 2027 | IBES Ph.D. Student Representative in the PhD Board for the 2024-2027 term.

Awards

Dec 2023 | Scholarship for the Leonardo Drone Contest
The scholarship supported training in autonomous systems for aerial robotics, focusing on developing control algorithms for the 2023 edition of the Leonardo Drone Contest.

Sep 2025 | Finalist for the Best Master Thesis Prize of the IEEE Control Systems Society (CSS) Italy Chapter
National recognition awarded to outstanding Master's theses in the field of Systems & Control defended at Italian universities in 2024-2025.

Teaching

A.Y. 2025/2026	Teaching assistant for "Automazione dei processi industriali M", 30h, Master Degree in Management Engineering, Alma Mater Studiorum Università di Bologna, held by prof. I. Notarnicola.

Theses Co-Supervision

2024 – current	Co-supervision of the Master's theses in Automation Engineering at University of Bologna: A. Maugeri (2024), R. Innamorati (2025), A. Missiato (2025)

Projects

Jul 2024	Sanitization of unknown environments via Autonomous Mobile Robots ROS2 Development of the Navigation Stack for an autonomous mobile robot. Design and implementation of ROS2 packages for autonomous navigation and mapping of an unknown environment.
Jul 2024	Distributed Classification via Logistic Regression and Aggregative Optimization for Multi-Robot Systems Distributed Classification carried out with Gradient Tracking algorithm. Aggregative Tracking algorithm implemented on Python and ROS2.
Jan 2024	Optimal Control of a Supersonic Aircraft Design and Implementation of an optimal control law for a supersonic aircraft with nonlinear drag and lift. Trajectory generation, Trajectory tracking via LQR, Trajectory tracking via MPC.

Certificates

Jun 2022	IELTS Exam Grade: 7.5/9 - C1 Level British Council Milan, Italy.

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Bologna, December 22, 2025	*Davide Valenti*