

# Tommaso Bocchietti

Mechanical Engineer | MSc Mechatronics & Robotics (Dec 2025)

Gilching, Munich Metropolitan Area (DE)

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“Innovation through hands-on engineering”

Enthusiastic Mechanical Engineer passionate about model-based design, control theory, and embedded systems.

Driven by curiosity and hands-on experience, with a constant focus on optimizing existing solutions and designing what has yet to be imagined.

Seeking opportunities in dynamic environments spanning robotics, aerospace systems, and embedded development, where mechatronic solutions and intelligent control systems push the boundaries of innovation.

## Experience

### Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)

Oberpfaffenhofen, Munich (DE)

ROBOTICS RESEARCHER

01.04.2025 - 19.12.2025

- Developing a regrasping framework for the DLR's Hybrid Compliant Gripper (HCG).

### Polimi Sailing Team

Politecnico di Milano, Milan (IT)

MECHATRONIC ENGINEER

19.10.2023 - 20.10.2024

- Developed high-performance NMEA0183 communication libraries in C/C++ for real-time marine sensor integration.
- Designed STM32/ESP32 firmware to interface peripheral sensors and actuators with control units via CAN and ESP-NOW protocols.
- Selected as the overall winners of the 2024 edition of the “SuMoth” competition among 11 participating teams.

### Politecnico di Milano in partnership with RIMAC Automobili

Politecnico di Milano, Milan (IT) & RIMAC  
Automobili, Zagreb (HR)

MECHANICAL ENGINEER INTERN

09.03.2023 - 01.06.2023

- Designed an innovative electric personal transportation vehicle concept aligned with RIMAC Automobili's vision for sustainable urban mobility.
- Developed 3D CAD models in OnShape and conducted structural FEA simulations to validate design integrity.
- Conducted ergonomic analysis and iterative design refinements to optimize user comfort, safety, and vehicle performance.
- Collaborated in an international team of 10 students from multiple European universities.
- Selected by company engineers as the best project among the 4 participating teams.

## Education

### Politecnico di Milano

Milan (IT)

MSc IN MECHANICAL ENGINEERING (MECHATRONICS AND ROBOTICS)

13.09.2023 - 10.12.2025 (expected graduation)

- Current GPA: 29.35/30
- Relevant coursework: Mechatronic Systems A, Lab - Mechatronics, Feedback Control Systems, Nonlinear Control, Advanced Dynamics, Autonomous Vehicles, Machine Learning, Data Analysis, Topology Optimisation, Actuating Devices
- Scholarships: Politecnico di Milano Merit-based Scholarship (2023-2024, 2024-2025)

### University of Waterloo

Waterloo (CA)

MSc IN MECHANICAL ENGINEERING (ERASMUS+ EXCHANGE)

01.01.2024 - 26.04.2024

- Exchange focused on advanced computational methods and materials science.
- Courses taken: Advanced Finite Element Methods, Special Topics in Materials, Computational Fluid Dynamics

### Politecnico di Milano

Milan (IT)

BSc IN MECHANICAL ENGINEERING

14.09.2020 - 21.07.2023

- Relevant coursework: Mechanics of Vibrations, Applied Mechanics, Numerical Methods, Machine Design, Structural Mechanics, Fluid Mechanics, Thermodynamics, Fluid Machines
- Scholarships: Politecnico di Milano Merit-based Scholarship (2020-2021, 2021-2022, 2022-2023)

## Technical Skills

### Modeling & Simulation

MATLAB/Simulink, ROS, Model-Based Design

### Embedded Systems

STM32, ESP32, Arduino, Raspberry Pi

### Programming

C/C++, Python, Java | Web stack (JS, PHP, MySQL)

### CAD & Design

CATIA V5, SolidWorks, Inventor

### Tools

Git, CI/CD, LaTeX, Linux, Windows

## Languages

### Italian

Native

### English

Proficient