



MARCO DELL'ORO

Control Systems Technology section, Eindhoven University of Technology

✉️ marcodelloro99@gmail.com | ☎️ (+39) 349-159-7542 | GitHub | LinkedIn

📍 Lecco, Italy

EDUCATION

Politecnico di Milano

M.Sc. in Mechanical Engineering - Mechatronics and Robotics

September 2021 - April 2024

GPA: 28.44/30

Eindhoven University of Technology

Abroad M.Sc. Thesis student under the supervision of Prof. Mauro Salazar

September 2023 - March 2024

Politecnico di Milano

B.Eng. in Industrial Engineering - Mechanical Engineering stream

September 2018 - September 2021

WORK EXPERIENCE

Eindhoven University of Technology

May 2024 - December 2024

Research & Teaching Assistant at CST lab - Mechanical Engineering Department

PoliMi Sailing Team

September 2022 - September 2023

Member of Mechatronics Department

Istituto Maria Ausiliatrice

February 2022 - July 2022

Part-time Mathematics and Physics high school teacher

RESEARCH & PROJECTS

Model Predictive Pandemic Control

May 2024 - December 2024

Eindhoven University of Technology

Mathematical modelling and system identification of an age-stratified compartmental model for infectious diseases. Extension of the work done in my master thesis: “*Development and analysis of epidemiological compartmental models for pandemic parameter estimation and forecasting*”.

Extended Kalman Filter for asynchronous sensors fusion

Spring 2023

PoliMi Sailing Team - Politecnico di Milano

On-paper design of an Extended Kalman Filter algorithm for sensor fusion of IMU and GPS signals to estimate boat velocity on the water plane. MATLAB® and Simulink® validation in Simscape Multibody environment.

PySINDy and Neural Networks for dynamics estimation

Spring 2023

Politecnico di Milano

Data Analytics for Mechanical System exam assignment. Analysis of Lorenz Chaotic system, implementing PySINDy package and coded a simple three-layered Neural Network for chaotic dynamics learning.

PUBLICATIONS

M. Dell'Oro, D. Herceg, R. Bertollo, V. Breschi, D.Krishnamoorthy, M. Salazar

“MPPC: A Data-Driven Framework for Infectious Diseases Identification and Control”

In preparation for journal submission

D. Herceg, **M. Dell'Oro**, R. Bertollo, F. Miura, P. de Klaver, V. Breschi, D. Krishnamoorthy, M. Salazar

“A Scenario-based Model Predictive Control Scheme for Pandemic Response through Non-pharmaceutical Interventions”, *2025 9th IEEE Conference on Control Technology and Applications (CCTA)*, Under review.

AWARD & ACHIEVEMENTS

Politecnico di Milano Scholarship “Tesi all'estero”

December 2023

Thesis abroad scholarships by Politecnico di Milano “*Merit Project*”.

TECHNICAL SKILLS

Programming Languages

MATLAB, Julia, Python, Simulink

Scientific Writing

LaTex