Marco Gallo

☆ Genova, Italia 3460782558 marco.paolo.gallo@gmail.com in/MarcoGallo github.com/MarcoGallo

Profile

I am a Marine Engineer with a Master's degree and a PhD in Electrical Engineering from the University of Genova. My research focuses on ship energy efficiency, with particular attention to both optimization problems and data-driven approaches aimed at supporting more sustainable and intelligent maritime systems.

Education

• PhD in Electrical Engineering UniGe

Genova, Italy *Jan 2022 – May 2025*

Thesis: "Development of Optimization Algorithms for Shipboard Applications"

• MSc in Naval Architecture and Marine Engineering (UniGe) GPA: 28/30 - Final grade: 108/110

Genova, Italy *Mar* 2019 – Oct 2021

Publications

- M. Gallo, D. Kaza, F. D'Agostino, M. Cavo, R. Zaccone, F. Silvestro. "Power Plant Design for All-Electric Ships Including the Assessment of Carbon Intensity Indicator" Energy, 2023. link
- F. D'Agostino, M. Gallo, M. Saviozzi, and F. Silvestro, "A Model Predictive Control-Based Energy Management Strategy for Secure Operations in Shipboard Power Systems" TTE, 2024. link
- F. D'Agostino, M. Gallo, M. Saviozzi and F. Silvestro, "An Energy Management Strategy for an Inland Smart Port with Optimal Ferries Allocation," IEEE PESGM, Austin, TX, USA, 2025. (accepted)
- M. Gallo, C. M. Cooke, J. S. Chalfant, F. D'Agostino and F. Silvestro, "Linearization Techniques for Optimizing PEBB-Based Power Corridor Using Mixed-Integer Linear Programming," AEIT HVDC International Conference, Genova, Italy, 2025.
- M. Gallo, C. M. Cooke, J. S. Chalfant and F. D'Agostino, "A Multi-Objective Design for PEBB-Based Power Corridors in Shipboard Applications," IEEE Electric Ship Technologies Symposium (ESTS), Alexandria, VA, USA, 2025.

For a complete list of publications, please refer to my ResearchGate profile: Marco Gallo - ResearchGate.

Experiences

• President *Elettra APS*

Genova, Italy 2024

President and co-founder of Elettra APS, a student association designing electric boats for international competitions.

• Visiting Student MIT Sea Grant

MIT, Cambridge, MA 2024

Joined MIT Sea Grant's visiting student program (June-August 2024) to develop a PEBB sizing algorithm using Matlab/GAMS.

• Research Internship Cetena S.p.A.

Genova, Italy 2023

Worked on several research projects focused on energy system modeling and data analysis for shipboard applications.

Programming Skills

Matlab Programming, Simulink Modelling, GAMS, Latex (Professional); Python, Julia, DigSilent, TRNSYS (Basic knowledge).

Communication and Interpersonal Skills

- Public Speaking Comfortable speaking in public and encouraging interaction to improve workplace communication.
- Non-verbal Communication Skilled in reading and interpreting non-verbal cues.
- Problem Solving Enjoy tackling challenges to enhance technical output and workplace efficiency through technology.

Languages

Italian (Native), English (C1), French (A2)