David Battistelli

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EDUCATION

Nov. 2024 to Present — **Tuscia University** — **Viterbo, Italy**
MSc in Mechanical Engineering — *GPA: 28/30*

- Subjects include Advanced Fluid Machinery and Energy systems, Sensors and data acquisition system, Unconventional Technologies for product development, Nuclear Fusion
- Elected student representative on the Engineering Faculty Council at Tuscia University, currently maintaining the position awaiting new elections
- Master thesis in collaboration with EPFL's Swiss Plasma Center, developing a transferable framework for integrating the MEQ Suite with the TRUST fusion reactor and scalable to next-generation plasma devices.

Sep. 2021 to Nov. 2024 — **Tuscia University** — **Viterbo, Italy**
BSc in Industrial Engineering — *Final grade: 101/110*

- Contributed to R&D and chassis development for the university's Formula SAE team, project received Tesla sponsorship for lithium-ion battery integration.
- Selected among the top 5% of candidates for a Porsche AG engineering project and factory visit in Stuttgart, based on academic performance and project submissions.
- Bachelor's thesis: "Analysis and Optimization of the Position of Stabilising Plates in the TRUST Reactor Experiment," using MATLAB and MAXFEA for simulation and design analysis.

WORK EXPERIENCE

Aug. 2025 to Present — **Swiss Plas*ma Center – EPFL*** — **Lausanne, Switzerland**
Researcher & Project Intern

- Worked on the integration of TRUST tokamak numerical models with MEQ (EPFL's proprietary suite for plasma equilibrium analysis), creating a framework to ensure compatibility and adaptability to a wide range of tokamaks for equilibrium analysis.
- Contributed to the design of optimal configurations for magnetic coils and diagnostics to improve plasma profile reconstruction in TRUST.

Aug. 2023 to Oct. 2023 — **MG Sustainable Engineering AB** — **Uppsala, Sweden**
Project Management Intern

- Worked to the PV+ Solarus project by developing simulation code in Engineering Equations Solvers and MATLAB to analyse the heat exchange in PVT panels; drafted final report recommending +3 material improvements and future design iterations
- Collaborated with Gävle University's to model and simulate the electrical performance of PVT systems, leveraged energy laboratory equipment for detailed experimental analysis
- Assisted in designing the electrical schematics of PVT panels using AutoCAD, producing 2D models to support electrical system integration of PVT panels

ADDITIONAL INFORMATION

- Accredited as lifeguard by National pool lifeguard qualification in 2018 and volunteered at Red Cross during pandemic emergency, providing +100kg of food supplies
- Selected in "Mentors4U" mentoring program among top 25% of applicants
- Passionate about climate change, technology and sailing
- Languages: Italian (Native), English (Fluent), Spanish and French (Intermediate)
- IT: MS Office (Advanced), Python (Intermediate), MATLAB (Intermediate), Engineering Equation Solvers (Advanced), Ansys (Basic), SolidWorks (Basic), Maxfea (Basic)