TOMMASO D'ACUNZIO

Energy and Nuclear Engineering MSc Student

+39 342 578 4559 tommaso@dacunzio.it github.com/tomdacu

linkedin.com/in/tommaso-dacunzio

EDUCATION

Politecnico di Torino — M.Sc. in Energy and Nuclear Engineering Oct 2024 – Present
Average grade (GPA): 28,7/30; Expected end in March 2027

Aalto University — Erasmus+ Exchange Year Sep 2025 – Jul 2026
Full-year mobility program.

Politecnico di Torino — B.Sc. in Energy and Nuclear Engineering Oct 2021– Oct 2024
Thesis: *Potential and advantages of using ex-industrial sites for photovoltaic plants*

PROFESSIONAL EXPERIENCE

Politecnico di Torino — Research Fellowship (Preliminary PV plant feasibility study) Gen 2025 – Mar 2025

- Conducted the preliminary assessment of PV systems in the low-MW range in an industrial area in Northern Italy.
- Modelled multiple layouts using Excel and industry-standard software (PVSyst), comparing fixed-tilt and single-axis tracking options; ground mounted and rooftop installations.
- Evaluated energy yield, shading effects, CAPEX/OPEX assumptions and preliminary LCOE.
- Provided advisory-level insights on potential revenue schemes (market sale, self-consumption, Energy Communities).

Politecnico di Torino — Teaching Assistant (Energetica e Fonti Rinnovabili) Apr 2025 – July 2025

- Supervised 40 students developing PV, wind, hydrogen storage and heat pump projects.
- Reviewed calculations, sizing assumptions and modelling workflows (Excel, MATLAB, sector tools).
- Supported data sourcing from agencies, journals and datasets.

Elettricità Futura — Intern (Energy sector analysis) Dec 2024 – Feb 2025

- Monitored Italian and EU electricity markets, analysing price dynamics and renewable penetration.
- Processed datasets from GSE, Terna, ENTSO-E and Eurostat, building automated Excel and Python tools.
- Contributed data-driven insights to internal studies, presentations and technical briefs.

EoliTOWind Engineering (Student Team) — System Engineer Nov 2023 – Oct 2024

- Lead designer of an off-grid battery system for a micro scale wind turbine; performed LFP cell thermal modelling in MATLAB.
- Built a weather-station data pipeline to optimise turbine control and Cp.

TECHNICAL SKILLS AND SOFTWARE KNOWLEDGE

Modelling & Analysis : Ansys, SolidWorks, Onshape.
Programming: Python, MATLAB, LaTeX.
Solar Industry software: OpenSolar, PVSyst.
Wind Industry software: WindPro, QBlade.

EXTRA PERSONAL PROJECTS

Compressed-Air Energy Storage (CAES) Modelling Tool (Python)
Built an independent Python-based tool using turbomachinery models, as a spin-off of a successful Simulink CAES project based on real components and market data. The program allows users to vary key plant parameters and observe the resulting performance, providing a quick way to explore energy and exergy efficiency; the code is publicly available on GitHub.

LANGUAGES

Italian: Native **English:** IELTS Academic 7.5 (Advanced)