Giacomo Guidotto

xxxx@gmail.com — xxxxxxxxxx — linkedin.com/in/giacomo-guidotto — github.com/giacomoguidotto

Education

Ca' Foscari University of Venice, *Bachelor of Science in Information Technology*, Venice, Italy Sep 2022 – Jul 2025

- Foundations in algorithms, data structures, software development, and AI. **Grade: Laude, GPA: 29.0/30**
- Research Thesis in the application of Physics-Informed Neural Networks in epidemiological modeling.
- Core courses: Algorithms, Computer Architecture, Operating Systems, Networking, C, OOP, Introduction to AI

University of Gothenburg, *Erasmus Exchange Program*, Gothenburg, Sweden Sep 2024 – Jan 2025

- Relevant coursework: Introduction to Data Science and AI, Functional Programming

Achievements

- Selected among top 15% of STEM mentees (2,000+ applicants), LeadTheFuture, 2025
- Selected for a summer school on cutting-edge CS research led by world-class researchers, BOOST '25, 2025
- Acquired a C2 level in English, Cambridge Advanced English, Grade: 203, 2025

Experience

Software Developer, Danfoss, Venice, Italy Sep 2022 – Present

- Designed and developed web applications, microservices, and data pipelines for an IoT platform.
- Promoted from Junior role in 2 years, leading to increased responsibility and impact.
- Technologies used: TypeScript, React, Go, Python, SQL, Kubernetes, CI/CD, Git, Azure, etc.

Scientific Researcher, Ca' Foscari University of Venice, Venice, Italy Oct 2025 – Present

- Leading the creation of a new Python Library capable of building and configuring Physics-Informed Neural Networks.
- Reduced training time by 30% by introducing innovative stopping criteria in the Neural Networks training.
- Technologies used: Python, PyTorch, uv, GitHub, Docker, etc.

Projects

PINN: Work in progress. Developing a modular and flexible Python Library for solving mathematical problems using Physics-Informed Neural Networks. The ultimate goal is to provide an exceptional development experience, utilizing automated scripts that streamline the project setup for the user.

Workspace: Designed a declarative and robust yet flexible development environment. With configurations ranging from the Operating System to the single applications, following the XDG standard. Using Nix allows for a reproducible and sandboxed development experience.

Skills

Programming:	Python (NumPy, Pandas, Scikit-learn, PyTorch), DBs (PostgreSQL, VictoriaMetrics), Typescript (Nest, React), Go, Nix, Git, LaTeX
Tools:	Azure DevOps, MageAI, Sentry, Grafana, Bytebase, Postman, GitHub, Docker
Languages:	Italian (Native), English (C2)
Interests:	Fitness, traveling, film, studying, etc.

I hereby authorize the treatment of my personal data according to the local law