Guglielmo Gattiglio

guglielmogattiglio.github.io, g.gattiglio@gmail.com,
www.linkedin.com/in/guglielmogattiglio

For a picture of me, see my LinkedIn!

EDUCATION

University of Warwick — **Coventry, UK**
- PhD Student – Department of Statistics – **finalist (**Prof. Tamborrino M. and Grigoryeva L.) Oct 2021 – Early 2025
- Research interests: machine learning, Gaussian processes, random neural networks, genAI & LLMs, parallel and distributed computing, generative modeling for time series, probabilistic numerics
- **Publications**:
  - **NeurIPS 2024.** RandNet-Parareal, a time-parallel PDE solver using Random Neural Networks (2024). GG, TM, GL.
  - **Under review**. Nearest Neighbors GParareal: Improving Scalability of Gaussian Processes for Parallel-in-Time Solvers (2024). Authors: GG, TM, GL.
  - **Upcoming**. ProbParareal: A Probabilistic Parallel-in-Time Solver for Differential Equations. GG, TM, GL.

Bocconi University — **Milan, Italy**
- Master in Data Science and Business Analytics – major in Data Science Sep 2019 – Jul 2021
- Final GPA: 29.7/30. Graduation mark: 110/110 **cum laude**
- Relevant Coursework: Advanced Statistics, Stochastic Processes, Optimization, Statistical Machine Learning, Deep Learning, Natural Language Processing, Computer Vision
- Final Thesis: *Tempered Stochastic Search of Bayesian CART Models* (Prof. Zanella G.)

Bocconi University — **Milan, Italy**
- Bachelor in Economics, Management and Computer Science Sep 2016 – Jul 2019
- Final GPA: 29.8/30. Graduation mark: 110/110 **cum laude**
- Relevant Coursework: Economic Theory, Statistics, Machine Learning, Algorithms, Programming (Python)
- Final Thesis: *Machine Learning for Imbalanced Data. An application to Customer Complaints* (Prof. Durante D.)

Carnegie Mellon University — **Pittsburgh, PA, USA**
- Exchange University. Semester GPA: 3.75/4 Jan – May 2019
- Exchange Coursework: Modern Data Management, Advanced Statistics for Data Analysis, Data Mining

RESEARCH AND WORK EXPERIENCE

Warwick Artificial Intelligence – Student association, University of Warwick — **Coventry, UK**
Project Lead 2023-24

Student project in collaboration with industry partners Andy Pardoe and WisdomWorks. Combined large language models and computer vision to develop a high-end recommender engine for the housing market.

Bocconi Institute for Data Science (BIDSA) — **Milan, Italy**
Student Researcher. Supervisors: Prof. Durante D. and Zanella G. Mar 2020

Analysis and presentation of seminal and state-of-the-art papers to colleagues and professors. Main subjects tackled: Bayesian Nonparametrics, Probabilistic Machine Learning, Markov Chains and MCMC methods.

Goldman Sachs — **Warsaw, Poland**
Summer Analyst in the Technology Division – Software Developer Jul – Sep 2018

Developed innovative and effective backend infrastructure to improve ease of creation of financial products. Main technologies used: Python and Java.

IGIER Research Center – Bocconi University — **Milan, Italy**
Research Assistant. Team leader: Marco Tabellini (Harvard) Jan– Jun 2018

Explored applications of Natural Language Processing techniques in the economic and social sciences literature. Studied, presented, and applied Latent Dirichlet Allocation to 1920-1930 USA books and congressional speeches, seeking to detect racial themes and understand their connections with immigration.

CERTIFICATIONS & AWARDS

Certifications

NVIDIA, Accelerating CUDA C Applications with Multiple GPUs (Jun 2024)

NVIDIA, Fundamentals of Accelerated Computing with CUDA Python (Feb 2024)

Awards

Code reproducibility award at the Third BioInference Conference, held at the University of Warwick

Travel funding award from the 38th Conference on Neural Information Processing Systems (**NeurIPS 2024)**

RELEVANT SKILLS

Languages

Italian - Native speaker

English – Fluent, level C2

French – Level B1

German – Actively learning

Data Science & Programming

Python	MySQL, Tableau	LaTeX	Java
JAX, TensorFlow, PyTorch	Git	R	

Proficient with main **ML/AI Python frameworks**. Experience with software deployment and **docker**, Linux servers, Slurm workload manager, Javascript, webservers (Python Flask, NGINX), and backend development. Experience with robotics and Arduino. Experience with **cloud computing** (AWS/Google Cloud) and **LLM frameworks** (e.g. Hugging Face, Langchain).

Teamwork

I firmly believe that teamwork, collaboration and sharing of ideas are as important as being able to work independently and self-responsibly. I am self-driven, hard-working and able to prioritize. In the workplace, I am sociable and friendly.

TEACHING (selected)

University of Warwick – Department of Statistics - Senior Graduate Teaching Assistant

- ST346: *Generalised Linear Models for Regression and Classification*. Bachelor level (2024)
- ST420: *Statistical Learning and Big Data*. Master level (2023)
- ST202: *Stochastic Processes*. Bachelor level (2022)

University of Warwick – Warwick Business School (WBS) - Senior Graduate Teaching Assistant

- IB9CS: *Big Data Analytics.* Master level (2022)

Bocconi University – Teaching Assistant

- *Python Programming for Economics, Management and Finance*. Bachelor level (2020)

ABOUT ME

Passionate about problem solving, regardless of the discipline: math competitions, programming hackathons, complex data science projects, robotics applications. I am curious, I like to explore different fields of knowledge and ask myself scientific questions about the things I read or that I discover through my hobbies and interests.

Interests. Self-improvement, machine learning, hardware electronics, statistics, psychology, hiking in nature, rock-climbing, history and technology of medieval metallurgy, bow-making.

Hobbies and sports. I enjoy running, skiing, cycling, and cooking. In the past, I did Judo for 5 years at a competitive level.