Roberto Neglia

Contacts: ✉ robertoneglia99@gmail.com 📱 +39 345 670 4038 in LinkedIn GitHub

Education

UiT - the Arctic University of Norway, Tromsø, Norway, 2024 - current
Ph.D. in Mathematics and Statistics.
Machine Learning for graphs and time series data.
Visiting @ Graph Machine Learning Group, USI (Lugano) (Nov. 2024 - Feb. 2025)

Politecnico di Milano, Milan, Italy, 2022 - 2024
M.Sc. in High Performance Computing Engineering.
Grade: 110L/110, GPA: 28.87/30

Università della Svizzera Italiana, Lugano, Switzerland, 2022 - 2024
M.Sc. in Computational Science.
Grade: Summa cum Laude, GPA: 9.13/10

Politecnico di Milano, Milan, Italy, 2018 - 2022
B.Sc. in Computer Science Engineering. Final grade: 103/110

Thesis

"Benchmarking Graph Neural Network architectures for Drug Response Prediction". Jan. 2024 - Sep. 2024
Explore how personalized medicine could benefit from advanced machine learning techniques, such as Graph Neural Networks, for the problems of Drug Response Prediction and Drug Repurposing.

University Projects

Knowledge Powered Conversational Agent, USI, Dec. 2023 - Jan. 2024
A ChatBot that uses the WizardOfWikipedia dataset to answer with context.
Multi-Branch Neural Network, USI, Oct. 2023 - Nov. 2023
A Convolutional Neural Network that implements an early exit strategy for computational efficiency in energy-constrained applications.
Neurodegeneration Prion Spread, PoliMi, Dec. 2022 - Jan. 2023
Mathematically modeled the spread of prions in the brain using PDEs, and then solved it with the FEM using the `deal.II` C++ library.

Work Experiences

Deloitte Touche Tohmatsu Limited, Milan, Italy, Nov. 2021 - Mar. 2022
Internship in Deloitte Digital, I worked full-time as a full-stack software engineer in a team involved with the Energy and Oil&Gas Industry.

Other Experiences

Effective High-Performance Computing and Data Analytics
Swiss National Supercomputing Center summer school, Lugano. July 2024.
PASC24 Volunteer, ETH Zurich, Jun. 2024
ISC24 EUMaster4HPC Ambassador, Hamburg, May 2024
High Performance Data and Graphs Analytics, **Biomedical Computer vision**, PoliMi, extracurricular courses, 2024.
HPC for Environmental Aspects, EUMaster4HPC summer school at Université Grenoble Alpes. July 2023.
EuroHPC Summit, active participation at the 2023 and 2024 EuroHPC Summit as an HPC Ambassador, on behalf of EUMaster4HPC.
Waiter, summer job, helped me with multitasking, teamwork, efficient communication, time and stress management, positive attitude.

Skills

Linux, Bash, Python (PyTorch, PyTorch Geometric, TensorFlow, Pandas, NumPy, scikit-learn, SciPy, Matplotlib, Seaborn), C/C++, CUDA (NVIDIA certificates), R, LaTeX, Slurm/Torque, Git/GitHub, Docker, PC assembly.

Awards and Fellowships	**Mentee at LeadTheFuture**, 2023 - current
	EUMaster4HPC merit-based mobility scholarship, 2022 - 2024
	Merit-based reduction of tax contributions, PoliMi, 2018 - 2020
	"Best Freshmen" Award, PoliMi, 2018 - 2019

Posters	**Accelerating Jacobi solver for the 2D Poisson equation.**
	Presented at the 2023 EuroHPC Summit in Gothenburg and at the HPC for Environmental Aspects Summer School in Grenoble.
	Graph Deep Learning for Cancer Drug Response Prediction and Generation.
	Presented at the Generative AI in Life Science Workshop (GenLife) 2024, Copenhagen.