Matteo Stromieri
Nationality: Italian

06/2024 Trento, Italy
HIGH-PERFORMANCE COMPUTING SUMMER SCHOOL Trento University

The Summer School offers an intensive program on the entire hardware and software stack of HPC. The course addresses a broad
audience, including PhD students, young researchers, professional engineers operating in the industry, and outstanding undergraduate students.
Website https://hpc-summer-school-24.disi.unitn.it/home **Field of study** high-Performance Computing

02/2024 – CURRENT Rome, Italy
MSC IN COMPUTER SCIENCE University of Rome Tor Vergata

• Relevanti courses:
• Distributed Algorithms
• Computing Architectures for Big Data
• Parallel Computing
• Machine Learning
• Deep Learning

• WAM: 30/30
Field of study Deep Learning, Distributed Computing

09/2023 – 01/2024 Trieste, Italy
MSC IN SCIENTIFIC AND DATA-INTENSIVE COMPUTING SISSA

• Awarded with the only one 100% scholarship by Collegio Universitario Luciano Fonda
• After a semester spent in Trieste, I decided to come back to Rome to continue to study Computer Science

Field of study High-Performance Computing

10/2020 – 08/2023 Rome, Italy
BSC IN COMPUTER SCIENCE University of Rome Tor Vergata

Field of study Algorithms, Distributed Computing **Final grade** 110/110 with honors

Thesis BPLP: Blockchain-based Passwordless Login Protocol

Parallel Quicksort

• *Tech Stack: C, OpenMP, MPI, Bash, Python*
• Implemented an hybrid parallel version of the Quicksort sorting algorithm using both OpenMP and MPI, therefore exploiting

both the shared and distributed memory paradigm.
• Implemented some optimizations like memory padding, loop tailing and unrolling to better exploit locality and the AMD EPYC

architecture.
• Benchmarked my code on a multi-node cluster.

Link https://github.com/MatteoStromieri/High-Performance-Computing-Project/tree/master/exercise2

Partial Differential Equations (PDE) Solver

• *Tech Stack: Python, Numpy, Mathplotlib*
• Designed and implemented a solver for a PDE using two different finite difference schemes.

Link https://github.com/MatteoStromieri/Numerical-Analysis/blob/main/FinalProjec.ipynb

Strongly Connected Components of a Graph visualizer

EDUCATION AND TRAINING

PROJECTS

• *Tech Stack: (Vanilla) Julia*
• Designed an algorithm to compute the strongly connected components of a graph.
• Implemented this algorithm in the Julia programming language and wrote a Pluto notebook containing animations of this

algorithm on a large number of example graphs to understand its operation.
Link https://github.com/MatteoStromieri/Julia-Project

Programming
Python C/C++ Julia R Java Bash Assembly ARM Assembly x86
Libraries/Frameworks
OpenMP OMP MPI CUDA PyTorch Numpy
Others
mySQL MongoDB Docker Linux OS Kubernetes Git VMware
Theoretical Knowledge
(Advanced) Computing Architectures Operative Systems Data Structures Networks Algorithms

10/2022 – 10/2023 Rome
PRESIDENT BOARD OF EUROPEAN STUDENTS OF TECHNOLOGY

• In charge of maintaining the entire structure of the Local Best Group Rome Tor Vergata, an organization with more than 40
members, and managing the Board of Administration, which is made up by 6 people

• Organized several local and international events for students in collaboration with different companies (General Dynamics, DXC
Technology, etc...) and research institutions.

02/2022 – 06/2022 Rome, Italy
MAIN ORGANIZER BOARD OF EUROPEAN STUDENTS OF TECHNOLOGY

• In charge of managing the entire organization of the project ”BEST HACK”, a competition about Algorithms and Cyber Security.
• Led a team of 6 people toward a goal, coordinating and monitoring the team for 5 months.
• Managed relationships with partner companies (Gyala, Deloitte) throughout the organization of the event along with the

fundraising responsible

Mother tongue(s): **ITALIAN**
Other language(s):

UNDERSTANDING SPEAKING WRITING
Listening Reading Spoken production Spoken interaction

ENGLISH C1 C1 B2 B2 C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

09/2023
Honor Student and 100% Scholarship Winner – Collegio Universitario Luciano Fonda

• The "Collegio Universitario Luciano Fonda" is officially recognized as a "Merit-Based University College". It outstanding living
facilities and offers a wide range of interdisciplinary educational activities.

• I was the only SDIC student to be selected for the fellowship at the college offered by the Department of Mathematics and
Computer Science at the University of Trieste.

Link https://www.collegiofonda.it/

DIGITAL SKILLS

WORK EXPERIENCE

LANGUAGE SKILLS

HONOURS AND AWARDS