



Chiara Di Stefano

WORK EXPERIENCE

RESEARCH INTERSHIP – PROF. DANIELE DE SENSI - SAPIENZA UNIVERSITY OF ROME – 03/2025 – 10/2025 – ROMA, ITALY

Implementation and analysis of the Dragonfly+ network topology on **ht-sim simulator**. Design and development of two routing algorithms, one static and one dynamic, optimized for this topology. In the final part of the project, simulations were carried out to verify the correctness of the implementation, followed by performance analysis and a comparison between the two algorithms and between the **Dragonfly+ topology** and the **Fat Tree topology**.

EDUCATION AND TRAINING

09/2022 – 10/2025 Rome, Italy

B.SC. IN INFORMATICA Sapienza University of Rome

During my studies, I have developed a solid foundation in the core areas of computer science, through a combination of theoretical knowledge and practical projects by using different programming languages and technologies. My studies have enhanced my capacity to work effectively both independently and within a team. I have gained the skills needed to contribute to the design, development, and management of software systems, computer networks and security solutions for computing systems.

- Acquired proficiency in programming languages including **C, C++, Python, Go and Java**.
- Experience with High-Performance Computing (HPC) systems, particularly using MPI, CUDA and OpenMP for efficient parallel processing in scientific computing.
- Understanding of **networking concepts** and communication protocols.
- Experience with ht-sim simulator and deep understanding of supercomputer topologies.
- Knowledge of fundamental mathematics and algebra and its application as a tool to support computer science.
- Algorithms, Data Structures, and Optimization.
- Knowledge of various operating systems and computer architectures.
- Design and management of relational databases, including SQL development and database modeling using UML.
- Basic knowledge of security and web design.

Final grade 110 with lode

09/2017 – 06/2022 Francavilla al Mare, Italy

DIPLOMA SCIENTIFICO Liceo Scientifico "A. Volta"

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

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

● SKILLS

Performance Analysis | C | C++ | CUDA | Parallel Programming (MPI, OpenMP) | Python | Git | SQL | Distributed Architecture | Go | Java | Distributed, Scalable and Parallel Programming | Ht-sim simulator

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".