MATTEO SANTORO

Birth Date: 5th March 1995
Nationality: Italian
Current Address: Via Selvanese 45,
30030 Martellago (VE), Italy
Email: matteosantoro561@gmail.com
Mobile: +39 340 625 54 80

EDUCATION

Scuola Internazionale di Studi Superiori Avanzati - SISSA *October 2023 - Present*

PhD in Theoretical and Scientific Data Science

I am currently part of Guido Sanguinetti's group for a PhD project focused on symmetries in Deep Learning and Hyperbolic Deep Learning, in collaboration with the University of Turin. During the first year of the program I followed courses on the state of the art of Bayesian Inference, Neural Networks and Differential Geometry.

École Polytechnique Fédérale de Lausanne (EPFL) *September 2018 - February 2021*

M.Sc. in Life Sciences Engineering - Minor in Mathematics - 5.63/6

I was admitted at EPFL with an Excellence Fellowship.

During the master, I acquired tools to better understand the problems of learning in biological and artificial neural networks, stepping into more theoretical fields such as algebraic topology and statistical learning thanks to my minor in maths.

I graduated with a thesis on the connectivity of a computational model of the rat somatosensory cortex.

Politecnico di Torino *October 2017 - July 2018*

B.Sc. in Mathematics for Engineering - 110/110 Cum Laude

I acquired this degree to complete my academic curriculum with courses from the area of mathematics, in order to have a broader background and to allow me to understand advanced topics that would have otherwise been inaccessible.

I graduated acquiring 61 ECTS in just one year with a GPA above 29.00/30.00 (98% percentile).

Politecnico di Torino *October 2014 - July 2017*

B.Sc. in Biomedical Engineering - 110/110 Cum Laude

During this degree, I developed my first basic knowledge of engineering and biomedical engineering, coupled with understanding of biological issues and processes (biochemistry, biomechanics, basic physiology and electrical bioengineering courses).

I got accepted in a program for promising students (Percorso Giovani Talenti), accessible by top 5% students only, which also gave me the opportunity to attend the Universidad Politecnica de Madrid, where I broadened my knowledge on highly applied courses.

I graduated acquiring 212/180 ECTS in three years with a GPA above 29.50/30.00 (99% percentile).

ACADEMIC EXPERIENCE

UPHESS lab - BMI - EPFL *April 2021 - February 2022*

Research intern - Scientific assistant

I furthered my master's project research topic, studying the relationship between neuronal reliability and neighborhood topology in the mouse somatosensory cortex computational model. I worked in collaboration with the Blue Brain Project and familiarized with their high performance computational resources, resulting in a publication:
Heterogeneous and higher-order cortical connectivity undergirds efficient, robust, and reliable neural codes, Egas Santander D. et al., iScience, Volume 28, Issue 1, 111585.

EPFL *September 2020 - December 2020*

Teaching assistant - Introduction to ML for Bioengineers

During my master, I worked as a teaching assistant in the course Introduction to Machine Learning for Bioengineers, where we taught Machine Learning basics to bachelor students.

WORK EXPERIENCE

Qintesi SpA *January 2023 - June 2023*

Consultant

I worked in an IT consultancy company, where I developed SQL queries in the SAP environment. In the same occasion, I familiarized myself with the GCP service. I have worked on Vertex AI Machine Learning pipelines and other Cloud Computing applications.

Learn to Forecast SA *February 2019 - August 2019*

Open source data science intern

During my curricular internship, I contributed to the early stage of the Giotto VP platform, a no-code machine learning solution. I contributed with Python code to a computer vision pipeline and developed the learning material for the platform.