



Francesco Mussin

MSc Mathematics Student at ETH Zürich

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Languages

Native	
C2	
A1	

Hobbies

- Playing Saxophone & Guitar
- Collecting vinyl records
- Language Learning (German and Portuguese)
- Game design

Technologies

Git, Rust, Python (networkx, pandas, sklearn, TensorFlow, PyTorch), R, RStudio, Java, MATLAB, LaTeX (tikz, pgfplots)

I'm a Mathematics master's student at ETHZ looking to apply my acquired knowledge in:

- Numerical Linear Algebra
 - Continuous and Combinatorial Optimization
 - Algorithm design
 - Statistics
 - Deep Learning
- to applications and problems such as
- Route Optimization (TSP, VRP, and variants)
 - AI-driven decision-making
 - Large-scale data analysis

Education

Master's studies in Mathematics

Eidgenössische Technische Hochschule Zürich (ETHZ)

09/2023 - 06/2026

Weighted Average: 5.69/6

Student Activities: MIC president, Data Analytics Club

Thesis: Sparse Neighbourhood Exploration in Vehicle Routing Problems

Improving speed and performance of the CVRP & CVRPTW local search component of the algorithm that the Institute for Operations Research produces in their collaboration with SwissPost for their routing problems.

Supervisor: Rico Zenklusen

Co-supervisors: Timo Ottiger, Christian Noebel

Undergraduate degree in Mathematics

Università degli studi di Milano-Bicocca (UniMiB)

10/2020 - 07/2023

Weighted Average: 29.65/30

Final Grade: 110 Cum Laude

Thesis: *The Classification of Finite Reflection Groups*

An exposition of the classification of all finite groups that are generated by reflections in some ambient euclidean space. Any such group can be uniquely identified by a Coxeter graph, and only a finite number of the "building blocks" of those come from such a group

Supervisor: Pablo Spiga

Diploma di Maturità

Liceo Scientifico Piero Bottoni

09/2015 - 06/2020

Final Grade: 100/100

Arithmetic Average: 9.09/10

Saxophone Courses

09/2018 - 06/2022: Scuola di Musica Cluster, with Valentino Finoli

09/2012 - 06/2018: Taught by Edoardo Lega

09/2011 - 06/2012: Civica Scuola di Musica Claudio Abbado