Antoine du Fresne von Hohenesche

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OBJECTIVE

I am currently finishing my first year of my master's program in mathematics at the Swiss Federal Institute of Technology Zurich. I seek to gain practical experience while further developing my skills in a research-oriented or applied setting.

I have a strong foundation in mathematics, including analysis, algebra, probability, measure theory, topology, first order logic, set theory, number theory, linear and discrete optimization, algebraic geometry, machine learning, neural networks, statistics, numerical analysis... I am particularly interested in applying these areas to solve complex problems in technical fields such as finance, blockchain, cryptographic protocols, optimization, and deep learning.

EDUCATION

Eidgenössische Technische Hochschule Zürich (ETH Zurich)

2024 - Present

Master in Mathematics

Founder of the ETHZ Math Olympiad Club.

École Polytechnique Fédérale de Lausanne (EPF Lausanne)

2021 - 2024

Bachelor in Mathematics

Co-founder of Polympiads

Honor prize in the International Mathematics Competition (IMC), two honor prize in Bernoulli Competition

Collège de Candolle, Geneva, Switzerland

2017 - 2021

Maturité Gymnasiale

With honors: "Mark Birkigt" (Best grades in Physics, Pure and Applied Mathematics)

Best Maturité of Collonge-Bellerive

Université de Genève, Geneva, Switzerland

2019 - 2020

Athena Program on Set Theory

Université de Genève, Geneva, Switzerland

2020

SwissMAP Program for Reading IN Groups (SPRING) on Topology

WORK EXPERIENCE

Mathematics Intelligence Engineer (Competitive)

February 2025 - May 2025

Mercor, San Francisco, USA (Remote from Zurich, Switzerland)

Contributed to a project in collaboration with Meta, focusing on the labelling of mathematical prompts from high school to graduate level. Employed secure remote tools (SRT), VPN, and Slack for coordination and data handling.

SKILLS

Programming Languages C++, MATLAB, Python, R

Languages French (Mother tongue),

English and German (full professional capacity)

Social Skills Former member of Gymnasial Society "Gymnasia" Geneva,

Current member of Student Society "Belles-Lettres" Geneva

OTHER INTERESTS

Physics, Biology, Chemistry, Programming, History, Geography, Paleontology, Music, Skiing, Scuba Diving, Paragliding, Self Defense.