Jacopo Philip Moretti

IN MA1 student at EPFL, with interests in theorem provers, formal verification, and languages, both natural and programming.
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`github`

Academic

MSc in Computer Science - EPFL   2024 - 2026

Pursuing a Master's Degree in Computer Science at the *Ecole Polytechnique Fédérale de Lausanne* (EPFL), with projected end in the year 2026. Fields of interest: Theorem Proving, Large Language Models.

BSc in Computer Science - EPFL   09.2021 - 07.2024

Bachelor's degree in Computer Science from the *Ecole Polytechnique Fédérale de Lausanne* (EPFL). Fields of interest: Programming Language Design, Theorem Proving.

Relevant courses include:

▷ *Algorithms* (CS250): Introduction to data structures, runtime analysis, and algorithm design. *Completed (5/6)*

▷ *Functional Programming* (CS207): Introduction to functional programming concepts, recursion analysis, symbolic and theoretical computer science. *Completed (5.75/6).*

▷ *Computer Language Processing* (CS320): Understanding the compiler pipeline, implementing its main steps in the Scala programming language. *Completed (5.5/6).*

▷ *Logique Mathématique* (MATH381): Basic model and proof theory, set axioms, syntax and semantics in first order logic. *Passed.*

▷ *The Software Enterprise - from ideas to products* (CS311) : Collaborative programming, both technical (`git`) and social (Agile programming, SCRUM ceremonies). Scored "Best Project" award with the ActualIA, an LLM-powered news aggregator. *Completed (4.75/6).*

French Baccalauréat   June 2021

Mention Très Bien avec Félicitations du Jury from the Lycée Chateaubriand de Rome (18.06/20). Obtained in conjunction with the Italian Esame di Stato (100/100).

Professional

Student Assistant :: Software Construction   Winter Semester, 23/24

Student assistant under Prof. Pit-Claudel, Prof. Odersky and Prof. Kunčak. Gained experience in assisting students, answering student questions on the forum and explaining concepts on blackboard. Implemented workflow for course recording and video editing.

STUDENT ASSISTANT :: STUDENTS 4 STUDENTS   2022, 2023

Student assistant for the association *Students 4 Students*: helped with the conception of classes and problem sets in Calculus, Linear Algebra and Discrete Mathematics, and tutored in exercise sessions.

TECHNICAL MANAGER :: FRÉQUENCE BANANE   May 2022 - May 2024

Committee member tasked with maintaining the technical (audiovisual and computer) infrastructure of an 80+ member student radio. Gained knowledge in writing code for large scale and long term use, managing a technical team, and audio engineering.

PRIVATE TUTORING   2021-2023

Private tutoring in Mathematics, Physics, Computer Science and French Language and Literature to teens of high school age and up.

Skills

Mathematics	Self-taught practice of the Coq interactive theorem prover. Particular interest in the fields of algebra and number theory, as well as model and proof theory.
Programming	Object oriented and functional programming, as well as basics of web frameworks. Languages *(in order of proficiency and preferred usage)*: Scala, Rust, Python, C, Java.
Teaching	LaTeX/Typst typesetting, course conception (theory, exercices), tutoring.
Languages	Italian: Native French: Fluent English: Fluent