Amaury Mazoyer

ENS de Lyon — Computer Science

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Research Interests

- Programming languages, type theory
- Formal methods, proof assistants

Research Experience

June-July 2025, 6 weeks   Research Internship — Centre Inria de l'Université Grenoble Alpes

Supervisor: Martin Bodin

- Topic: Function analysis in Rocq: bridging informal reasoning and formal proofs
- Methods: proof analysis, formal verification, real analysis

Education

2025 − current   Master d'Informatique

Master's degree in Computer Science (Master d'Informatique) in the École Normale Supérieure de Lyon (research-oriented elite institution).

Relevant coursework: Proofs and Programs, Semantics and Verification, Compilers and Program Analysis, Parallel and Distributed Algorithms and Programs, Optimization . . .

2024 − 2025   Double Licence: Informatique Fondamentale et Mathématiques

Licence d'Informatique Fondamentale (i.e a Bachelor's degree in fundamental computer science) in the École Normale Supérieure de Lyon and Licence de Mathématiques (i.e a Bachelor's degree in mathematics) in the Université Claude Bernard Lyon 1 validated in parallel through examinations.

Relevant coursework: Algorithms, Programming Language Theory, Foundations of Computer Science, Functional Programming, Logic . . .

2022 − 2024   Classes préparatoires aux grandes Écoles

Classes préparatoires aux grandes Écoles (a two year intensive undergraduate program preparing to the competitive entrance of grandes Écoles) in the Lycée Champollion in Grenoble.

Track MPI: Mathématiques, Physique et Informatique (Mathematics, Physics and Computer Science).

Class representative in 2nd year.

2019 − 2022   Baccalauréat général

Baccalauréat général, mention très bien, with a major in Mathematics, Computer Science and Engineering (equivalent to British A-levels).

Languages

- French (native)

- English (fluent, Cambridge English: Advanced — C1 grade B, score 197)

- German (basic knowledge, A2)

Academic Distinctions & Competitions

2024, 2025   **SWERC — Southwestern Europe Regional Contest (ICPC)**

Team participant for the ENS de Lyon (team-based competitive programming contest)

Projects

2025 – current   **VeriSLO**

A tool for streamlining Iris proofs of OCaml programs.

- https://gitlab.aliens-lyon.fr/verislo/verislo

2025   **Pieuvre**

A proof assistant based on the calculus of constructions inspired by Rocq and written in OCaml.

- Notable features: extensive list of tactics, including `inversion`, `auto` and `semiring`, implicit arguments, associated VsCode extension etc.

- https://gitlab.aliens-lyon.fr/jupon/pieuvre

2025   **Fouine**

An interpreter for the OCaml language written in OCaml.

- Notable features: includes the option to translate the input code into continuation passing style code.

- https://gitlab.aliens-lyon.fr/amazoyer/better-fouine

A (non-exhaustive) list of other smaller projects can be found here :
https://github.com/S-c-r-a-t-c-h-y/portfolio.

Technical Skills

Languages: OCaml, Rocq, Python, C, LaTeX
Tools: Git, Linux

Association Experience

2025-2026   IT manager of the BDE (Students' Union) of the ENS de Lyon