Youssef Miled

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EDUCATION

École Centrale de Lyon - *Engineer's degree / MSc in General Engineering*   2023 – April 2026
- GPA : 3.95/4.0. French 'Grande École'.
- *Math coursework*: Probability, Statistical inference, Numerical and applied analysis, Signal processing.
- *CS coursework*: Data analysis and machine learning, Algorithmics, Object-oriented programming.
- *Finance coursework*: Economics, Market finance, Enterprise management.

Lycée Champollion - *MP2I/MPI preparatory classes for French 'Grandes Écoles'*   2021 – 2023
- (1st/46). Intensive 2 year-curriculum to prepare for the entrance exam to the French 'Grandes Écoles'.
- *Math coursework*: Abstract and linear algebra, Probability, Optimization, Multivariable calculus.
- *CS coursework*: Algorithmics, Advanced data structures, Complexity, AI, Databases, Concurrency.

EXPERIENCE

Data Science research assistant - *LIRIS, CNRS*   September 2024 – April 2025
- Conducted research in statistical methods and machine learning to improve table tennis performance.
- Manipulated a database of more than 1000 matches including 53 matches from the Olympic Games.

Teaching assistant - *Lycée La Martinière - Monplaisir*   September 2024 – Present
- Organized weekly oral exams in mathematics for first-year preparatory program students in MP2I.
- Guided students into solving challenging problems in Linear algebra, Analysis, Calculus, Probability.

Software Developer - *ECLAIR, AEECL*   January 2024 – Present
- Front-end and back-end developer at Eclair, advancing the connectivity experiences on campus.
- Contributed to the development and integration of the loan module in the application MyECL.

IT Manager - *Centrale Lyon Conseil Junior Enterprise*   November 2023 – Present
- Responsible for overseeing data management and website administration of this Junior Enterprise.
- Led the migration project to an open source software (ERP Next) for CRM and internal management.

PROJECTS

EduCapture | *Java, Android Studio, Github, LateX*   September 2023 - June 2024
- Project manager of a team of 6 members developing a classroom learning support application using Android Studio and text processing algorithms in order to provide feedback on student note-taking.
- Design and development of two comprehensive interfaces tailored for both teachers and students.

Type System for secure information flow | *OCaml, LateX*   2021 – 2023
- Designed, developed, and extended a comprehensive type system for a simple imperative language, which I defined by defining a grammar in OCaml, and successfully integrated function handling capabilities.
- Implemented n-ary trees to represent type proofs, and a type checker to ensure their correctness.
- Proved the noninterference property for the extended type system to ensure secure information flow.

TECHNICAL SKILLS

Coding	C, Python, Matlab, OCaml, SQL, JavaScript, HTML, CSS
Tools	Android Studio, Jupyter Notebook, Visual Studio Code, Git, LaTeX, Ubuntu Linux
Language	English (*Fluent*), Arabic (*Native Language*), French (*Fluent*), Spanish (*Intermediate*)