Youssef Miled

06 49 95 42 31 | youssef.miled7@gmail.com | linkedin.com/in/youssef-miled
github.com/ymiled | personal website

EDUCATION

École Centrale de Lyon - *Master of Science in General Engineering*   2023 – April 2026
- GPA : 3.95/4.0. French Grande École
- Probability, Statistics, Partial differential equations, Numerical and applied analysis, Optimization.
- Algorithms and data structures, Object-oriented programming, Data analysis and pattern recognition.
- Economics, Market finance, Stochastic calculus, Enterprise management.

Lycée Champollion - *MP2I/MPI preparatory classes for French 'Grandes Ecoles'*   2021 – 2023
- (1st/46). Intensive 2 year-curriculum to prepare for the entrance exam to French 'Grandes Écoles'.
- Probability, Abstract and linear algebra, Optimization, Differential equations, Multivariable calculus.
- Advanced algorithms (C, OCaml, Python), AI, Machine learning, Databases, Parallel computing.

Lycée Champollion - *General French Baccalaureate*   2018 – 2021
- Grade: 18.08/20 (highest honors with congratulations of the jury). Mathematics, Physics, Engineering.

EXPERIENCE

Data Science research assistant - *LIRIS, CNRS*   August 2024 – April 2025
- Conducted research in statistical methods and machine learning to improve table tennis performance.
- Used a database of 53 matches in the Olympic Games, worked with the French Table Tennis Federation.
- Wrote a research paper in the « Machine Learning and Data Mining for Sports Analytics » workshop.

Software Developer - *ECLAIR, AEECL*   January 2024 – Present
- Developer at Eclair, in a team advancing the connectivity experiences of Centrale Lyon students.
- Contributed to the development and integration of the loan module in the application MyECL.

IT Manager - *Centrale Lyon Conseil Junior Enterprise*   November 2024 – 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 intern management.

Private Tutor - *Complétude*   November 2024 – Present
- Organized weekly sessions in mathematics and physics for high school and university-level students.
- Helped a student gain admission to MP2I preparatory classes, the most selective STEM program.

PROJECTS

EduCapture | *Python, Java, AndroidStudio, 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

Weex - Week of Engineering Experience | *MATLAB*   March 2024
- Worked in a group of 12 to quantify polluting gases emissions for sites of a fictitious enterprise.
- Parsed datasets and simulated gas propagation after developing fluid mechanics equations.

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, Java, 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*)

Certificates

Supervised Machine Learning | *Deeplearning.AI, Stanford Online, Coursera*   2024
- Worked on supervised and unsupervised machine learning, regression models, and training models.

Interests

Quantitative research or trading, machine learning research, software engineering, data analytics.