Youssef Miled

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Summary

MEng Operations Research student with AI expertise and software development experience, building scalable systems. Seeking new grad roles in ML engineering, applied science, data science, or software development.

Education

UC Berkeley, *MEng in IEOR*, California, USA — Aug 2025 – May 2026

- **Relevant Coursework:** ML and Data analytics, Mathematical Programming (PhD level), Applied Stochastic Processes (PhD level).
- Teaching assistant for the course "Computer Simulations with Jupyter Notebooks" (Fall 2025).

Centrale Lyon, *Engineer's degree*, Lyon, France — 2023 – 2025

- General Engineering, Applied Mathematics, Computer Science.
- Teaching assistant in Signal Processing for final-year undergraduate students (Fall 2024).

Lycée Champollion, *MP2I/MPI preparatory program*, Grenoble, France — 2021 – 2023

- Grade: A (1st/46)
- Intensive 2-year program for the highly competitive entrance exams to the French Engineering Schools, spanning Mathematics, Physics, and Computer Science.

Skills

Programming	Python, C/C++, SQL, OCaml, Matlab, Java, JavaScript, HTML, CSS
ML	NumPy, Pandas, scikit-learn, PyTorch, OpenCV, OpenVINO
Tools / Platforms	Docker, Git, Jupyter Notebook, Ubuntu, LaTeX
Languages	English: *Fluent*, French: *Fluent*, Arabic: *Native*, Spanish: *Professional proficiency*

Professional Experience

AI research intern, CISPA Helmholtz Center for Information Security — May 2025 – July 2025
Saarbrücken, Germany
Supervisors: Franziska Boenisch*, Adam* Dziedzic

- Researched parameter-efficient fine-tuning and smooth cascade unlearning through reversed self-distillation to make LLMs forget private data, showing that standard cascading between unlearning methods adds privacy risks.
- Implemented in-context unlearning and membership inference attacks on the new smooth cascading method, achieving 1.2% TPR at 1% FPR.
- Contributing to an ICLR 2026 submission in collaboration with Prof. Boenisch, Prof. Dziedzic; part of CISPA, ranked first globally in cybersecurity.

Projects

Small Language Models for Edge AI in Space, *Satlyt*, San Francisco, USA — Sep 2025 – May 2026
Capstone project. Supervisor: Rama Afullo

- Project with UC Berkeley and Satlyt, focusing on prototyping a ground-based system simulating Small Language Models deployment on satellites for onboard decision-making, using AWS IoT Greengrass and OpenVINO.
- Designing lightweight AI models and deploying them on satellite hardware to process data locally, reduce latency, and enable autonomy in orbit.

Data analysis for table tennis matches, *LIRIS*, Lyon, France — Sep 2024 – April 2025
Research project. Supervisor: Romain Vuillemot

- Developed physics-based models and leveraged player performance data to pinpoint bounce uncertainty zones and strike timing patterns, enabling more accurate player classification and strategic insights.
- Engineered and enriched a dataset of 8,679 shots from professional matches; reconstructed 3D ball trajectories via physics simulations and achieved high-precision validation against ground truth using RMSE metrics.