

Ahmed Taha Chaoui Kouraichi

chaouika@tcd.ie +33 6 35 47 70 19 Dublin, Ireland ahmedchaoui.com



Data Science & AI student at EURECOM, currently in Dublin for an MSc in Computer Science (Data Science) at Trinity College Dublin. I build AI systems end to end: two production chatbots shipped for a French city government (fine-tuned LLM + Google Dialogflow CX), a KV-cache compression benchmark over 20k+ LLM queries, and fast product prototypes in Python, React and Supabase. I can own both the model and the interface in a one-day build.

AI & DATA PROJECTS

- KV-Cache Compression Benchmark for LLM Inference • Llama 3.1/3.2, Qwen2.5, LLaVA-Next**2025 – 2026
 - Benchmarked Expected Attention, KVzip and FinchPress on text and multimodal QA, sweeping compression ratios 0.2–0.9 over 20k+ queries
 - Expected Attention held 84–85% accuracy at 80% cache compression while running ~4.5× faster than the KVzip baseline (392 ms vs. 1770 ms mean latency per query)
- Multimodal Sports Outcome Prediction & Value Betting • PyTorch, RoBERTa**01/2026 – 04/2026
 - Built a late-fusion pipeline combining rolling match-statistic sequence encoders with 768-dim text embeddings to predict football match outcomes
 - Backtested the resulting betting strategy to +24.8% ROI against majority-class and statistical baselines
- Predictive Uncertainty via Deep Ensembles • reproduction of Lakshminarayanan et al., 2017**10/2025 – 12/2025
 - Reproduced deep-ensemble uncertainty estimation on UCI regression and MNIST/notMNIST OOD classification; evaluated calibration and OOD detection against a single-model baseline

EXPERIENCE

- AI Engineering Intern, DGSITG, City of Épinal**06/2025 – 08/2025
Épinal, France
 - Deployed and fine-tuned two AI chatbots for the city's digital ecosystem, taking both from prototype to production use
 - Internal LLM-based assistant fine-tuned on municipal data and securely connected to the city database, cutting IT support tickets that required manual intervention by 37%
 - Public-facing assistant built with Google Dialogflow CX and integrated into epinal.fr to help residents navigate city services

EDUCATION

- MSc in Computer Science (Data Science), Double Degree, Trinity College Dublin**09/2026 – 05/2027
Dublin, Ireland

Admitted through a competitive mobility selection process. Modules: Machine Learning, Data Analytics, Applied Statistical Modelling, Optimisation for Data Analysis, Data Visualisation, Scalable Computing, Security & Privacy.
- Engineering Degree (MEng equivalent) in Data Science & Security, EURECOM**09/2024 – 06/2027
Sophia Antipolis, France

Taught entirely in English. Coursework: Advanced Statistical Inference, Applied Statistics, Information Theory, Cybersecurity, Cloud Computing & Data Security, Database Systems.
- CPGE MPSI / PSI*, Mathematics & Physics, Lycée Fabert**09/2022 – 06/2024
Metz, France

Two-year intensive preparatory programme for the French elite engineering schools.

LEADERSHIP

- President, EURECOM Student Union**09/2024 – 06/2025

Led an executive team running large-scale campus events and international trips; managed the association's budget and official filings, and launched a student media platform.
- Head of Partnerships, EURECOM Student Union**09/2025 – 06/2026

Owned corporate relations and sponsorship; negotiated and signed commercial and institutional partnerships.
- Finance Member, EURECOM Junior Enterprise**09/2024 – 12/2025

TECHNICAL SKILLS

AI / ML	PyTorch, Hugging Face Transformers, LLM fine-tuning & RAG, RoBERTa, KV-cache compression, deep ensembles, scikit-learn, NLP, computer vision, pandas, NumPy
Languages	Python, SQL, C, C++, Java, JavaScript, TypeScript, Bash, MATLAB, HTML/CSS, LaTeX
Build & Deploy	Google Dialogflow CX, Azure, Vercel, Supabase, React, Tailwind CSS, Git/GitHub, MCP, Playwright
Spoken	French (native), Arabic (native), English (C1/C2), Spanish (conversational)