OUMAIMA CHATER

Phone: +33 7 78 63 30 60 — Email: chtr.oumaima@gmail.com
LinkedIn: oumaima-chater — GitHub: Ouma487
Based in France - Open to relocation

EDUCATION

Centrale Supelec   **08/2021 – 12/2024(Graduated)**
Engineer in Artificial Intelligence   *Gif-sur-Yvette, France*
- Key studies: Probability, Statistics, Optimization, Programming, Big Data, Data Science, Machine Learning, Deep Learning, NLP, Computer Vision, Game Theory, Reinforcement Learning.

Preparatory Classes for French Grandes Écoles (CPGE)   **09/2019 – 06/2021**
MPSI & MP – Advanced Mathematics, Physics, and Engineering Sciences*   *Rabat, Morocco*
- Intensive program focused on advanced mathematics, physics, chemistry, and problem-solving for competitive engineering school entrance.

PROFESSIONNAL EXPERIENCE

Libertify   **12/2024 – Present**
AI Engineer   *Paris, France*
- Deployed multimodal RAG pipelines and agents for document/image/video processing at scale.
- Developed AI workflows (media analysis, background removal) with robust testing for production.
- Focused on reusability and modularity for scalable LLM-powered automation.

Renault   **05/2024 – 10/2024**
AI Engineer Intern   *Guyancourt, France*
- Built predictive ML pipelines from diagnostics data for recurring vehicle fault detection.
- Applied LLM prompt engineering to optimize internal tooling and RFP generation.
- Collaborated cross-functionally on scalable AI tool deployment.

PROJECTS

Genvia – Predictive Manufacturing | *ML, VAE, Domain Adaptation*   **10/2023 – 04/2024**
- Developed anomaly detection model (VAE+UDA) for electrolyzer failures (90.8% accuracy).
- Digitized workflows saving 160+ analyst hours; ongoing internal paper in progress.
- Awarded **Prix de l'Innovation Dzung Tran** for impact and novelty.

Multi-Agent Robot Mission Planning | *Simulation, Optimization, MAS*   **03/2024**
- Simulated autonomous robots cleaning radioactive waste across 3 zones with constrained mobility and waste conversion rules.
- Developed two strategies: (1) random non-communicating agents, and (2) hierarchical agents with communication and target assignment.
- Achieved **100% task completion** and reduced steps by 3.5× in all 40 runs with communication vs. 60% without.

Emotion Recognition | *AI, Computer Vision, Audio Processing*   **02/2024**
- Built a deep learning system for facial and audio emotion detection using CNNs and LSTMs.
- Achieved 90.3% image accuracy and 75.8% audio accuracy.

TECHNICAL SKILLS

Languages: Python, MATLAB, C++, SQL
Machine Learning: Scikit-Learn, TensorFlow, PyTorch, Langchain
Web, Cloud & DevOps: FastAPI, AWS Lambda, GCP, Git
Data & Visualization: Pandas, NumPy, SciPy, Power BI, Seaborn, Matplotlib, Excel, Neo4j, PostgreSQL, MongoDB

LANGUAGES

Arabic: Native   **French:** Bilingual Proficiency   **English:** Full Professional Proficiency