

# LEBAILI Mohamed Ouail

## Contact

Email: lebailimohamedouail@gmail.com  
Phone: +213 540576016  
LinkedIn: linkedin.com/in/ouail  
GitHub: github.com/waelalg

## Technical skills

Languages: Python, JavaScript (ES6+), C/C++, Java, SQL  
Web: Next.js, React, MERN  
Backend/DBs: Node.js, Express, Django, PostgreSQL, MongoDB  
Cloud/DevOps: Oracle OCI (certified), Docker, CI (GitHub Actions)  
AI/ML: PyTorch, TensorFlow, scikit-learn  
Embedded/IoT: Raspberry Pi, Arduino (Wokwi), MQTT  
Tools: Swagger, Postman, Git, Docker

## Languages (human)

Arabic — Native  
French — Proficient  
English — Proficient

## Certifications & Awards

- Coursera Machine Learning Certificate By Stanford University
- Oracle Cloud Infrastructure 2025 Certified Architect Associate (exp. 29 Oct 2027)
- Winner — SecAI Datathon 2024

## Professional summary

Computer Systems Engineering student (ESI-SBA) with practical experience in embedded systems, IoT telemetry, real-time systems, full-stack web development and applied ML. I design end-to-end solutions — firmware, simulation, backend services, dashboards and ML analytics. Experienced in datathons and internships; strong collaborator and open-source contributor.

## Education

- **Higher School Of Computer Science Sidi Bel Abbes (ESI)** Sep 2023 – Present  
*State Engineer & Master's Degree — Computer Systems Engineering (ISI)*  
Relevant coursework: Computer Networks, Embedded/IoT, Real-Time Systems, Cloud, Advanced AI, ML, Cybersecurity.
- **Higher School of Computer Science (Preparatory Cycle)** Sep 2021 – Jun 2023  
*Preparatory cycle in Computer Science*  
Data Structures, Algorithms, OOP, Computer Architecture, Discrete Math.
- **Baccalaureate in Mathematics — With Honors** Jun 2021  
High School Diploma — Algiers, Algeria.

## Experience

- **National Agency for the Valorization of Hydrocarbon Resources (ALNAFT)** Sep 2024  
*Fourth-Year Internship — Computer Science Department*
  - Exposed to enterprise workflows; collaborated across technical teams and departments.
  - Participated in data handling, tools integration and project practices.
  - Assisted in internal tooling and operational procedures.
- **Freelance Software Developer** 2023 – Present  
*Remote / Self-employed*
  - Delivered end-to-end software solutions: requirement gathering, design, implementation and deployment.
  - Managed full development lifecycle and coordinated with stakeholders.

## Selected Projects

- **AI-Powered Botnet Attack Detection on IoT Devices** — Python, PyTorch, ns-3. Engineered time-series features and trained temporal models; improved detection F1 via feature engineering; CI-enabled reproducible experiments.
- **Raspberry Pi Face Recognition Attendance System** — Python, OpenCV, TensorFlow Lite, Django. Deployed optimized on-device model (pruning + quantization) integrated with Django backend and dashboard.
- **School Inventory & Material Management System** — Node.js, Express, PostgreSQL, Docker. Designed REST APIs with role-based access; Dockerized services, tests and Swagger docs.
- **Industrial IoT Machine Monitoring & Control** — MQTT, Node.js, Dashboard. Telemetry ingestion, real-time dashboard analytics and alerting logic.

## Engagements & Achievements

- President — Alphabit Club (Scientific Club) (1 year); Finance Dev teams member.
- Participated in 2 Datathons, 2 Hackathons and 1 CTF competition.
- Winner — SecAI Datathon 2024 (with Algerian Spatial Agency).