

ZINEB BERREKIA

AI Engineer | AI Research & Data Science

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Portfolio: www.zinebbrk.com

PROFILE SUMMARY

Final-year Artificial Intelligence Engineering student at the Higher National School of Artificial Intelligence (ENSIA), specializing in AI and Data Science. Experience developing machine learning and NLP applications, retrieval-augmented generation systems, and data-driven solutions. Research interests include medical AI, reinforcement learning, computer vision, and large language models. Active in technical leadership and multidisciplinary projects.

EDUCATION

Higher National School of Artificial Intelligence (ENSIA – Algiers **2022 – Present**

- Master's + Engineering Degrees - Artificial Intelligence and Data Science

Baccalauréat (Mathematics) **2021**

- Honors: Very Good

TECHNICAL SKILLS

AI & Data: Machine Learning, Deep Learning, Reinforcement Learning, Computer Vision, NLP, Data Mining, RAG.

Programming: Python, C++, JavaScript, TypeScript, SQL, Dart.

Frameworks & Tools: scikit-learn, pandas, LangChain, FAISS, OpenAI API, React, Flutter, Git, Docker.

Databases & Design: PostgreSQL, Firebase, databases, Figma, UI/UX design, user-centered design.

PROFESSIONAL EXPERIENCE

AI Research Intern (Final Year Project / PFE) | ENSIA / Algiers **Sep 2025 – Ongoing**

RL-Based Liver Segmentation and Lesion Classification from CT Imaging

- AI-based system for automated liver and lesion segmentation from CT scans using reinforcement learning, followed by lesion identification and classification, with supervised models serving as comparative baselines.
- **Technologies:** Python, Medical Image Analysis, Computer Vision, Reinforcement Learning.

AI Intern | SLB (Schlumberger) | Digital & Integration | Hydra / Algiers **Sep 2025**

Internship focused on digital subsurface solutions and the upstream oil and gas value chain, from exploration to production.

- Contributed to an ML-based facies prediction task using well-log data to support geological interpretation and reservoir characterization.

SELECTED PROJECTS

Oil & Gas RAG Application – RDLab / Kabss **2025**

- Developed a document-based question-answering system specialized in the oil and gas industry using retrieval-augmented generation over uploaded documents.
- **Technologies:** Python, LangChain, OpenAI API, FAISS.

El-Bayan – Adaptive Arabic Grammar Learning Platform **2026**

- Worked on an adaptive Arabic grammar learning platform integrating NLP and curated linguistic data to support personalized learning flows.
- **Technologies:** Python, NLP, TypeScript, PostgreSQL.

Dual/Multi-SIM Detection – Djezzy **2025**

- Analyzed dual- and multi-SIM configurations using real telecommunications data, with applied AI and data-mining work in collaboration with Djezzy's innovation team.
- **Technologies:** Python, pandas, scikit-learn, Feature Engineering.

Reinforcement Learning for Network Routing Optimization **2026**

- Explored QoS-aware reward shaping and exploration decay in a dual-agent reinforcement learning approach for SDN routing.
- **Technologies:** Machine Learning, Reinforcement Learning, Networks.

Khotwa – Mobile Application **2024**

- Cross-platform mobile application for job and internship matching for Algerian users.
- **Technologies:** Flutter, Dart, Firebase.

Carelink – Healthcare-Oriented Platform **2023**

- Healthcare-oriented platform connecting patients and caregivers, with a focus on clear user flows and profile management.
- **Technologies:** JavaScript, Databases, PHP.

LEADERSHIP & ACTIVITIES

Vice President – Google Developer Group (GDG) ENSIA **2026**
Contribute to chapter strategy, community growth, and technical initiatives.

Marketing Head – GDG ENSIA **2024**
Led visual identity and media strategy; organized and produced content series.

Human Resources Manager – ETC ENSIA **2024**
Supported recruitment, onboarding, and member coordination.

IT Coordinator – AIFEST'26 **2026**
Coordinated technical activities for the GDG ENSIA datathon.

Events Organizer – ENSIA **2023 – Present**
Organized community events, including Technopoly Ideathon, March 8 celebration, and AIFEST Datathon.

SOFT SKILLS

- Communication
- Leadership
- Adaptability
- Team coordination

LANGUAGES

- Arabic
- English
- French