

Amine Barguellil

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Professional Summary

I build web applications, then immediately ask how to scale them, harden them, and make them smarter. That obsession with *what's next* is what pulled me into AI integration and DevOps — two fields that punish developers who stop being curious. Problems don't intimidate me — unclear ones are the most interesting.

Professional Experience

Frontend Developer
Freelance | July 2026 – October 2026

- Built **PrepAI**, a client's responsive **Next.js web application**, from **Figma designs**, translating UI requirements into reusable React components using **JavaScript (JSX) and native CSS**.
- Implemented **custom animations, complex layouts, interactive UI elements, and responsive styling** to maintain **visual consistency across desktop, tablet, and mobile viewports**.
- Leveraged **Claude Code** to accelerate **Figma-to-component implementation, debugging, refactoring, and iterative frontend development**.
- Applied a **spec-driven development workflow** using **GitHub Spec Kit** to structure **complex UI requirements, component specifications, spacing constraints, and responsive behavior, followed by manual visual refinement**.

DevOps Engineer
SafeSphere | August 2024 – July 2026

- Full-stack development of industrial web applications using **Next.js, Node.js, PostgreSQL**, and **microservices** architectures, delivering **scalable and high-performance solutions aligned with business and operational requirements**.
- DevOps pipeline design and optimization, including **Docker-based containerization, CI/CD automation, cloud deployment on a Hetzner Cloud virtual machine (VPS)**, **Cloudflare integration, and infrastructure management to enhance reliability, performance, and security**.
- Enterprise feature implementation **covering KPI dashboards, 8D problem-solving workflows, Jira integration, email notification systems, multilingual support, and real-time collaboration tools**.

Final Year Project Intern : Devops Intern
Scheidt & Bachmann Maghreb S.A.R.L | 1 February 2024 - 31 July 2024

- Deployment of a parking web application built with **Angular, Spring Boot, Keycloak, Apache Kafka, and MySQL** on **AWS**.
- Setup of a **complete CI/CD pipeline** for the project.
- Gaining valuable hands-on experience in **deploying applications** and managing **continuous integration and delivery processes**.
- Proficiency in using **modern cloud-based tools** to deliver effective and reliable solutions while **applying best practices in coding for the parking web app solution**.

Projects

Industrial Operations Management Platform
SafeSphere | August 2024 – July 2026

- **Used AI tools such as codex and claude code** to accelerate the development of **Jira synchronization, 8D problem-solving modules, KPI dashboards, multilingual features, and responsive UI enhancements** across the platform.
- **Applied AI-assisted code review and testing using codex** to improve **code quality, increase Jest test coverage, reduce duplication, and resolve maintainability and security findings** identified by **SonarQube**.
- Leveraged **AI tooling to optimize Redis caching, improve loading workflows, enhance frontend responsiveness, and support code refactoring and performance improvements** across the platform.

LangChain Multi-Agent Research Orchestrator | April 2026 – May 2026

- Developed a **multi-agent AI research platform** using **LangChain, Groq, and Tavily**, orchestrating **Search, Scrape, Writer, and Critic agents** to generate structured research reports.
- Built and containerized the application with **FastAPI and Docker**, enabling scalable deployment and **API-based interaction**.
- Automated cloud deployment on **Microsoft Azure using Terraform, Azure Container Registry (ACR), and Ansible**, implementing **Infrastructure as Code and CI/CD-oriented DevOps practices**.

Interviews Copilot | January 2025 - March 2025

- **Development of an AI-powered interview simulator** using **React, TypeScript, and Firebase** to help users enhance their interview skills through personalized mock scenarios.
- **Integration of a serverless backend architecture** with **the Gemini AI API** to generate tailored interview questions and provide real-time feedback.
- **Design of an intuitive UI** enabling users to create customized mock interviews and receive feedback to enhance their responses.
- Leveraging modern technologies like **Vite, Tailwind CSS, and Firebase** for **seamless, secure and scalable web application deployment**.

Upgrade, Refactoring, and CICD Integration of Microservices in a Cloud-Native Environment
Scheidt & Bachmann Maghreb S.A.R.L | 1 February 2024 - 31 July 2024

- Refactoring, upgrading, and merging microservices developed with **Spring Boot** to improve performance, maintainability, and system integration.
- Implementation of a **CI/CD pipeline** to automate testing, build, and deployment processes.
- **Integration and management of four microservices** communicating through **Apache Kafka** within a unified application architecture.
- Deployment on **AWS** of a cloud-native solution using **Angular, Spring Boot, Keycloak, Apache Kafka, and MySQL**, resulting in improved scalability, resource utilization, and operational efficiency.

Technical Skills

Programming Languages: Java v21, JavaScript v20.19.4, Python v3.13

Web Development: Tailwind CSS , Vite , ShadCN UI , Figma

Frameworks: Spring Boot v3.2.2, Angular v17, React js v19, Express js v5.1.0, Next.js v16.0.3, Flask 3.0.3, FastAPI 0.115.0

Databases: MongoDB, MySql, PostgreSql, Firebase, Prisma

Cloud & DevOps: Aws, Docker, Kubernetes, Git, Jenkins , Helm , Kafka, CI/CD, Azure

Operating Systems: Windows, Ubuntu

Code Quality: Sonarqube, Design Patterns, SOLID Principles, DRY, KISS, YAGNI, Exception Handling, RESTful API Design

Artifact Management: Nexus

Monitoring & Logging: Prometheus, Grafana

Authentication: Keycloak, Clerk, JWT

AI Tools: LangChain, Ollama, Retrieval-Augmented Generation (RAG), Chroma DB, Gemini Ai, Mcp

Infrastructure as Code (IaC): Terraform, Ansible

Testing: JUnit, Mockito, Jest, Postman

Education

National Engineering Diploma with High Distinction in Computer Science with a focus on Web Development
The Private Higher School of Engineering and Technology - Esprit Tunis | Sep 2021 - July 2024

National Entrance Examination to Engineering Schools (Tunisian Diploma) with Distinction
Tunis Preparatory Engineering Institute - Ipeit Tunis | Sep 2019 - June 2021

Bachelor's Degree in Mathematics with Distinction
Med Ali Annabi high school Ras Jebel | Sep 2018 - June 2019

Certifications

- **Cka certified kubernetes administrator - The linux Foundation**
- **Introduction to Front-end development Meta - Coursera**
- **Foundations: Data, Data, Everywhere - Google**
- **Machine Learning in Python : 365 Data Science**

languages

English: Bilingual , French: Bilingual , Arabic: Native