Salma BABA

DevOps & DevSecOps Engineer | CI/CD industrialization and security

Focused on CI/CD automation, build pipeline security and software for regulated environments.

Seeking a permanent full-time position · Available immediately

Open to relocation | Driving licence | +33 7 69 88 56 40 | salma2002ba@gmail.com | LinkedIn | GitHub | salmababa.com

PROFILE

Computer science engineer, Polytech Marseille graduate (September 2026), with 3 years of experience in CI/CD automation and software development on the information system of a regulated nuclear laboratory at CEA Cadarache. My research at Université de Montréal on build pipeline security led me to DevSecOps. I like to understand systems end to end, from the code to the infrastructure it runs on, and to ship reliable, well-documented solutions. I want to join a DevOps team to automate, harden and secure software delivery pipelines.

PROFESSIONAL EXPERIENCE

Software & DevOps Engineer (work-study) Sep 2023 - Aug 2026

CEA (French Alternative Energies and Atomic Energy Commission) — Cadarache, France

- Set up continuous integration and delivery (CI/CD) on GitLab CI: automated build, tests and publishing, secure secrets management.
- Automated tests in the pipeline: unit, integration and load tests, with a scale simulator on a virtual serial port.
- Release and deployment: self-contained executable (dotnet publish), alpha then beta testing with a dozen users, controlled rollout with IT on machines without admin rights.
- Designed and built an end-to-end business application (C#/.NET, WPF, MVVM, Entity Framework Core) replacing 3 legacy tools, under ISO 17025 (COFRAC) accreditation.
- Migrated the lab's historical data (Access databases, since 2003) to PostgreSQL: Python ETL pipeline, from profiling to cleaning and data loading.
- Integrated precision scales (MT-SICS serial protocol): automated weighing, calibration and compliance checks, certificate generation.

Research Intern - Cybersecurity & DevSecOps (international exchange) May 2025 - Aug 2025

Université de Montréal — Montréal, Quebec, Canada GitHub

- Research on software supply chain security: attack vectors targeting build pipelines.
- DevSecOps pipeline published on GitHub: SBOM (Syft), vulnerability scanning (Grype, Trivy), secret detection (Gitleaks).
- Migrated a Java build from Maven to Gradle and compared the binaries: identified and fixed the sources of difference (timestamps, file order, bytecode version) to achieve reproducible builds.

EDUCATION

Polytech Marseille Marseille, France
Engineering Degree in Computer Science (MSc level) - work-study at CEA Cadarache 2023 - Sep 2026

Aix-Marseille University Marseille, France
Bachelor's Degree in Mathematics and Computer Science 2020 - 2023

PROJECTS

Cloud Chat on AWS - Infrastructure as Code (academic project) GitHub

- Real-time chat built as Node.js microservices, containerized with Docker and deployed to AWS with Terraform.
- Architecture choices: authentication on Lambda (pay-per-use), messaging on ECS Fargate behind a load balancer with session affinity for stable WebSocket connections.
- PostgreSQL on RDS in a private network, frontend on S3, CI checking secrets, IaC and Docker images (Checkov, Trivy).

SECOMO - IoT & DevOps (inter-school innovation project, CFAI) GitHub

- Connected greenhouse: ESP32 sensors, FastAPI backend (measurements, alerts, watering), real-time React dashboard.
- Industrialization: platform provisioned with Ansible, Jenkins pipeline (pytest tests), continuous deployment to Kubernetes.
- Monitoring and observability: metrics and dashboards (Prometheus, Grafana), centralized logs (Loki).

TECHNICAL SKILLS

CI/CD: Git, GitLab CI, GitHub Actions, Jenkins
Containers & orchestration: Docker, Docker Compose, Kubernetes
Infrastructure as Code: Terraform, Ansible
AWS: Lambda, API Gateway, ECS Fargate, ECR, Application Load Balancer, RDS, S3, CloudWatch
Monitoring & observability: Prometheus, Grafana, Loki
DevSecOps: SBOM (Syft), vulnerability scanning (Grype, Trivy), IaC scanning (Checkov), secret detection (Gitleaks)
Languages & scripting: Python, Bash, PowerShell, C#/.NET (WPF, MVVM, Entity Framework Core), Java (Maven, Gradle), C/C++, SQL
Systems & databases: Linux, Windows, PostgreSQL, SQLite, MySQL

LANGUAGES, STRENGTHS & INTERESTS

Languages: French - fluent · English - professional (TOEIC 890) · Arabic - native
Strengths: Rigor · Ownership of long-running projects · International adaptability · Explaining technical topics clearly
Interests: Generative AI & tech watch · Diversity in tech · Running & cycling · Dance