# HAITAM BIDIOUANE

# Software Engineering Student @ENSIAS

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### **EDUCATION**

#### ENSIAS - NATIONAL HIGHER SCHOOL OF COMPUTER SCIENCE AND SYSTEMS ANALYSIS

RABAT, Morocco 2023 - Current

State Engineer's Degree in Software Engineering (Equivalent to a Master of Engineering - MEng)

## **PROFESSIONAL EXPERIENCE**

**DEVOPS ENGINEER | (INTERN)** 

July 2025 - September 2025 (3 months)

FEVERTOKENS

PARIS, France

- Benchmarked industry-standard EVM frameworks by evaluating their adoptability with DevOps-driven workflows and CI/CD interoperability.
- Engineered fully automated pipelines around FeverTokens' custom CLI to orchestrate compilation, testing and deployment of smart contracts.
- Proposed a GitOps-driven deployment engine for EIP-2535 Diamond contracts declarative deployment manifests to integrate state tracking with git version-controlled repositories.

Skills: GitOps, Declarative Programming, Bash, Shell Scripting, CI/CD, GitHub Actions, TypeScript, DevOps

DATA SOLUTIONS ENGINEER | (INTERN)

OCTOBER 2024 - MARCH 2025 (6 MONTHS)

SNRT (NATIONAL COMPANY OF RADIO AND TELEVISION)

RABAT, Morocco

- Developed a SOAP-based web service using ASP.NET Core and CoreWCF for ingesting HR CSV data from legacy systems.
- Engineered an enterprise-grade ETL pipeline with Apache Airflow for orchestration, Node.js for preprocessing, Kafka for asynchronous streaming, Apache Spark for transformation, Confluent for monitoring and an integrated Cassandra NoSQL database for scalable storage.
- Built a React.js dashboard for real-time monitoring and HR data report generation.

Skills: Python, Apache Airflow, Kafka, Confluent, Apache Zookeeper, Apache Spark, React, Node.js, Express.js, ASP.NET Core, C#, SOAP, XML

**SOFTWARE ENGINEER | (INTERN)** 

AUGUST 2024 - SEPTEMBER 2024 (2 MONTHS)

MINISTRY OF INDUSTRY AND TRADE

RABAT, Morocco

- Developed a centralized internship request management system with applicant-side submission, file uploads, and QR code-based tracking.
- Built an internal HRIS for request triage, forwarding, and decision-making, with real-time notifications and workflow automation.
- Collaborated with Operations/Cybersecurity teams to deploy the production-ready solution, now officially implemented at the Ministry level.

Skills: PHP, Symfony, PostgreSQL, NGINX, Redis, Docker, Mailhog, SMTP, Mercure (SSE Protocol), Merise, MVC

### **PROJECTS**

#### Keplereum: Blockchain-Based Decentralized Satellite Communication System for Ground Stations

- Developed an inter-satellite communication application based on Spring Boot microservices, featuring Eureka service discovery, centralized configuration, and Zipkin tracing, all deployed using Kubernetes and a Jenkins CI/CD pipeline. Designed a framework where each account operates its own private Ethereum blockchain (PoA Consensus via Geth), with a Solidity smart contract ensuring decentralized validation of satellite alerts.
- Developed a React/TypeScript frontend with a Go-based WebSocket gateway for real-time monitoring of satellites and their associated blockchain.

Skills: Ethereum, Java, Spring Boot, Spring Cloud, Maven, Hibernate, REST, React, Three.js, Kubernetes, Golang, Jenkins, Prometheus, Zipkin

# Monolithic-to-Microservices Optimized Migration Environment

- o Engineered a zero-downtime migration using the Strangler Fig, benchmarked against the Branch by Abstraction/Parallel Run strategies.
- o Architected a Kubernetes-native migration environment using namespace isolation and dynamic HPA-based autoscaling.
- o Deployed dedicated centralized observability stacks: EFK for log aggregation, and Prometheus/Grafana/Alertmanager with custom metrics for real-time migration health monitoring.

Skills: Kubernetes, Horizontal Pod Autoscaling, Strangler Fig Pattern, Monolithic Systems Migration, Elasticsearch, Fluentd, Kibana, Prometheus, Grafana, Database Migration (Dual-Write/CDC)

### AWS DevSecOps Hybrid CI/CD Platform

- Designed a hybrid enterprise AWS DevSecOps platform, using Terraform for core infrastructure and AWS CloudFormation for the CI/CD pipeline, artifact/log traceability and storage, and multi-environment deployment orchestration. Implemented SCA / SAST / DAST / RASP CodeBuild control stages, blue-green deployments, and automated normalization of security findings across two environments: staging and production.
- o Developed serverless security automation via AWS Lambda, integrating AWS Security Hub with vulnerability scanners (Snyk, OWASP ZAP, Clair, RASP Falco) for centralized compliance monitoring across static, dynamic (staging), and runtime (production) phases.

<u>Skills</u>: AWS (ECS, ECR, IAM, Lambda, S3, Security Hub, CodePipeline, CodeBuild, SNS, KMS, CloudWatch, CloudTrail), Terraform, CloudFormation, Snyk, OWASP Zap, CNCF Falco, Infrastructure as Code (IaC)

#### **CERTIFICATIONS**

AWS Certified Solutions Architect - Associate (SAA-C03) - Amazon Web Services (AWS)

**OCTOBER 2025** 

• AWS Certified Cloud Practitioner (CLF-C02) - Amazon Web Services (AWS)