# Chalkha Achraf

Computer Engineering Student



#### **Profile**

Final-year Software Engineering student, motivated, creative with practical experience in web, desktop, and command-line development, passionate about Java programming, DevOps practices, and modern web development, seeking a final-year internship opportunity to deepen my skills while contributing to innovative projects.

## Education

NATIONAL SCHOOL OF APPLIED SCIENCES OF AL HOCEIMA (ENSAH)	2022 - 2025
Computer Engineering Degree	
NATIONAL SCHOOL OF APPLIED SCIENCES OF AL HOCEIMA (ENSAH)  Preparatory Cycle	2021 - 2023
Oum Al Quora High School  Bachelor's Degree in Mathematical Sciences B - French Option	2020 - 2021

## Professional Experience

## ALTEN MAROC - Software Development Intern

July 2025 - August 2025

Fez, Morocco

- Developed an automated AI-powered ITSM platform using DDD microservices architecture with Spring Boot, PostgreSQL, Redis caching, and Apache Kafka for event-driven communication
- Implemented intelligent automated ticket routing and assignment system with NLP capabilities for automatic categorization, priority assessment
- Built a conversational AI chatbot integrated with knowledge base using RAG for automated self-service support across multiple channels
- Designed role-based access control system supporting four user roles with JWT authentication using DDD principles
- Created analytics dashboard with predictive capabilities for automated performance monitoring, KPI tracking, and anomaly detection to optimize support team efficiency
- DevOps Implementation: Containerized microservices using Docker, deployed on Kubernetes cluster with automated CI/CD pipeline via Jenkins, implemented monitoring with Prometheus/Grafana, and provisioned cloud infrastructure using Terraform

#### Projects

#### TALENT ACQUISITION MANAGEMENT SYSTEM (TAMS)

- Development of a recruitment management application with Spring Boot, Spring Security JWT, Microservices, DDD, EDA (CQRS) on the backend, and React.js with Redux on the frontend
- Ensures secure and efficient management of talent requests with automatic job posting
- Containerized microservices using Docker and implemented automated CI/CD pipeline with Jenkins for seamless deployment and testing

#### AI-BASED INTELLIGENT CAREER GUIDANCE

- Development of a Java application for personalized career recommendations, based on Spring Boot, MongoDB and secure authentication via JWT
- Creation of an interactive web platform with Angular for dynamic display of recommended paths and associated skills
- Dockerized application for containerized deployment and deployed on cloud infrastructure for scalable access

## WEB PLATFORM FOR TEXT ANNOTATION

- Development of a collaborative tool for text annotation and dataset management with Spring Boot, JWT, Thymeleaf
- · Role management, task management and security with intuitive interface and optimized performance

#### SOCIAL MEDIA SENTIMENT ANALYSIS WITH BIG DATA

- Development of a Java sentiment analysis application based on Hadoop, Spark and NLP models
- Creation of a user interface with JavaFX for results visualization

## UNISPHERE, SCHOOL MANAGEMENT WEB PLATFORM

- Development of a responsive web platform for managing administrative services at ENSAH
- Built with React.js frontend, Laravel backend API, and JavaScript for interactive features including student enrollment, grade management, and administrative workflows

# Technologies and Skills

Programming Languages: Java, PHP, JavaScript, Python, C++, C#

Web Technologies: HTML5, CSS3, Tailwind CSS, RESTful APIs, JSON, GraphQL

Frameworks & Libraries: Angular, Laravel, React.js, Next.js, TypeScript, Express.js, Spring Boot, Spring Security, Spring

Data JPA, Spring Cloud

Databases: MySQL, PostgreSQL, MongoDB, Redis, Oracle

Java Ecosystem: Java EE, Servlet API, JSP, Hibernate, Maven/Gradle, JPA, Microservices, Spring MVC DevOps & Cloud: Git, GitHub, GitLab, Docker, Kubernetes, JUnit, Jenkins, CI/CD, Linux, AWS, Terraform,

Prometheus, Grafana

Architecture & Design: Microservices, DDD, CQRS, Event-Driven Architecture, Design Patterns

Message Brokers & Tools: Apache Kafka, RabbitMQ, Postman, SonarQube, JIRA

## Certifications

ORACLE CERTIFIED ASSOCIATE, JAVA SE 8 PROGRAMMER - Oracle ORACLE CLOUD INFRASTRUCTURE FOUNDATIONS ASSOCIATE CERTIFICATE - Oracle

#### **Extracurricular Activities**

**President** – **ENSAH CHESS CLUB**: Organization of the first regional chess tournament FARAS, team coordination and effective communication. Development of leadership and event management skills.