

## Wael Ben Youssef

### Software Architecture Engineer & Full Stack Developer

Innovative Software Architecture Engineering student with extensive experience in full-stack development, DevOps practices, and microservices architectures. Proven track record of leading technical teams as Scrum Master while delivering complex applications across multiple platforms and technologies.

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**Web Presence:** [GitHub](#) | [Portfolio](#) | [LinkedIn](#)

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## Education

### Engineering Degree in Software Architecture

ESPRIT School of Engineering | September 2022 – Present

*Focus Areas: Software Architecture, Object-Oriented Programming, Web Development, Microservices Design, Data Science, Cloud Computing, CI/CD*

### Applied License in Information Technologies

ISSET Charguia | September 2018 – June 2022

*Focus Areas: Object-Oriented Programming, Web Development, Software Design*

### Mathematics Baccalaureate

Sokra High School | 2018

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## Professional Experience

### Full Stack Developer Intern | IPACT Consult INC

June 2024 – August 2024

Development of an enterprise-grade project management application that streamlined workflows and improved team productivity.

#### *Key Achievements:*

- Architected and implemented robust backend services with Spring Boot, handling complex business logic and data relationships
- Developed responsive and intuitive user interfaces
- Designed comprehensive API documentation, improving developer onboarding time

*Keywords: Angular, Spring Boot, REST API Architecture, Agile/XP Methodology*

## **Full Stack Developer Intern | La Poste Tunisienne**

### **Guarantee Management Application**

July 2023 – August 2023

Delivered a secure financial guarantee management system and eliminated document handling errors.

#### *Key Achievements:*

- Implemented role-based access control system meeting stringent financial security requirements
- Created comprehensive audit logging system for all transactions to ensure regulatory compliance
- Built interactive dashboards providing real-time insights into guarantee statuses and financial exposure

*Keywords: Spring Boot, Angular, MongoDB, Spring Security, JWT, RESTful API, Financial Systems*

### **Equipment Management Application**

January 2022 – February 2022

Designed an inventory management solution that improved equipment utilization and reduced procurement costs.

#### *Key Achievements:*

- Created intuitive asset tracking interfaces with real-time status updates and location mapping
- Implemented predictive maintenance scheduling algorithms to extend equipment lifespan

*Keywords: Angular, NodeJS, PostgreSQL, RESTful API, Bootstrap, Data Visualization, Asset Management*

### **Archive Management Application**

July 2021 – August 2021

Developed a document management system that reduced document retrieval time and improved compliance documentation.

#### *Key Achievements:*

- Built advanced search functionality with OCR capabilities for efficient document discovery
- Implemented version control system for document revisions with full audit history

*Keywords: Symfony, MySQL, Doctrine ORM, Twig, Bootstrap, Document Management, OCR*

### **Data Science Intern | Orange Tunisia**

February 2021 – May 2021

Designed and implemented predictive models that improved customer retention and optimized collection strategies.

#### *Key Achievements:*

- Developed machine learning models for churn prediction with good accuracy
- Automated data preprocessing pipelines, reducing analysis preparation time by 60%
- Presented findings to senior management, leading to implementation of new retention strategies

*Keywords: Python, Pandas, Scikit-learn, TensorFlow, Predictive Analytics, Customer Retention*

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## **ACADEMIC PROJECTS**

### **Servito: Mobile Restaurant Management Platform**

September 2024 – November 2024

As Scrum Master and lead developer, developed a simple Java mobile application for restaurant management with basic user authentication.

#### *Key Achievements:*

- Developed straightforward Java application allowing restaurants to manage their menu items
- Implemented basic user authentication for secure access with multiple roles
- Created simple ordering system for customers to browse menu and place orders
- Coordinated small team to deliver functional application on schedule

*Keywords: Java, Android Studio, Gradle, SQLite, Mobile Development, Agile/Scrum*

### **Microservices-Based Ski Station Management System**

September 2024 – November 2024

As Scrum Master and lead developer, orchestrated development of a scalable, cloud-native ski resort management platform that handled peak seasonal demands.

#### *Key Achievements:*

- Designed and implemented microservices architecture with clear domain boundaries

- Established inter-service communication protocols using message queues and API gateways
- Implemented centralized authentication and authorization with Keycloak
- Created comprehensive system documentation for maintainability and knowledge transfer

*Keywords: Keycloak, Node.js, Spring Boot, Angular, Docker, Kubernetes, Microservices, API Gateway*

## **DevOps Implementation for Ski Station Management**

September 2024 – November 2024

As Scrum Master, led implementation of modern DevOps practices, significantly improving deployment reliability and team productivity.

*Key Achievements:*

- Established CI/CD pipeline reducing deployment time from days to minutes
- Implemented infrastructure-as-code using Terraform for consistent environment provisioning
- Created comprehensive monitoring and alerting system with Grafana and Prometheus
- Developed automated testing strategy improving code coverage

*Keywords: Jenkins, Docker, , CI/CD, Grafana, Prometheus, , Infrastructure-as-Code*

## **Enterprise Forum Management Platform with AI Integration**

February 2024 – May 2024

As Scrum Master, led development of an AI-enhanced forum platform with advanced job classification and prediction features.

*Key Achievements:*

- Implemented job offer classification algorithms that categorized listings based on titles and descriptions
- Developed regression models to predict candidate numbers for job postings
- Created QR code generation for sharing job listings across platforms
- Built web scraping functionality to aggregate job listings from LinkedIn
- Implemented string-based authentication system for secure user access
- Led team to recognition as one of the top performing groups in the program

*Keywords: Angular, Spring Boot, Machine Learning, Data Mining, Classification Algorithms, Regression Analysis, Web Scraping, QR Code Integration, OAuth2, RESTful API*

## **Multi-Platform Carpooling Application**

February 2023 – May 2023

As Scrum Master, coordinated development of a carpooling solution with consistent user experience across platforms.

*Key Achievements:*

- Led development of location-based matching algorithm for ride optimization
- Implemented secure payment processing and escrow system
- Developed reputation and rating system to ensure platform trust
- Created cross-platform design system ensuring consistent UX across web, mobile, and desktop

*Keywords: Symfony, CodeNameOne, JavaFX, MySQL, Geolocation, User Authentication*

**FIND ME: Missing Persons Location Platform**

September 2020 – December 2020

As Scrum Master, led development of a community-driven platform for locating missing persons that assisted in multiple successful cases.

*Key Achievements:*

- Implemented geolocation services for mapping sightings and search areas
- Integrated with social media platforms for rapid information sharing
- Developed matching algorithm to correlate sighting reports
- Created secure communication channels between affected families and authorities

*Keywords: Symfony, MySQL, Google Maps API, Social Media Integration, Geolocation Services*

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## PERSONAL PROJECTS

**User Authentication System with Email Verification**

Developed a comprehensive MERN stack authentication system with email verification and password reset functionality.

*Keywords: MongoDB, Express, React, Node.js, JWT, Nodemailer*

**File Upload Application**

Created a file management system with blob storage capabilities using MERN stack.

*Keywords: MongoDB, Express, React, Node.js, Multer*

**Discord Bot**

Programmed a multi-functional Discord bot using JavaScript for server management and user engagement.

*Keywords: JavaScript, Discord.js, Node.js*

### **Desktop Kanban Task Management Application**

Built a desktop task management application with drag-and-drop functionality.

*Keywords: Python, Tkinter, MongoDB Atlas*

### **Mobile Kanban Task Management Application**

Developed a cross-platform mobile to-do application with persistent backend storage.

*Keywords: React Native, Express, MongoDB Atlas, Render (Deployment)*

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## **CERTIFICATIONS**

- Introduction to Web Development - GoMyCode, June 2019

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## **LANGUAGES**

- English: Professional working proficiency (B2)
- French: Professional working proficiency (B2)
- Arabic: Native proficiency
- German: Basic knowledge