

# BEN AMEUR HAROUN

Software Engineering Student

📍 Sousse, Tunisia

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## Profile

Final-year Software Engineering student passionate about web development, covering both backend and frontend technologies. Experienced in designing and implementing web applications, with solid expertise in databases, state management, and systems integration. Skilled in integrating AI into web development, particularly through RAG (Retrieval-Augmented Generation) pipelines, to enhance functionality and user experience. Active in several clubs and organizations, fostering continuous learning and collaborative teamwork.

## EDUCATION

- **Software Engineering Program** September 2021 - present  
Higher Institute of Applied Sciences and Technology of Sousse (ISSATSO))
- **Baccalaureate in Technical Sciences – High Honors** 2020/2021  
Mahmoud Mesaadi High School, Nabeul

## PERSONAL SKILLS

- Public speaking (experience presenting at NATEG hackathons)
- Adaptability and quick learning
- Teamwork and leadership

## ASSOCIATIVE EXPERIENCE

- Vice-President club NATEG ISSATSO (North American Tunisian Engineers Group)
- Member – ONET (National Organization for Children in Tunisia)

## TECHNICAL SKILLS

- **Programming Languages:** JavaScript, Python, Java, SQL C++
- **Frontend :** React ,Bootstrap,tailwind,CSS
- **State Management :** Redux
- **Backend Frameworks :** Django, Spring boot,node.js ,Express
- **Databases:** PostgreSQL, MySQL
- **Dev Tools:** Git, GitHub,Postman
- **Search Engine:** Elasticsearch

## LANGUAGES

- **Arabic :** Fluent
- **French:** Intermediate
- **English:** Intermediate
- **Spanish:** Beginner

## EXPERIENCE

- **Internship at Proxym-IT**

- **Title** : FSD File Analysis Platform with Automatic Test Case Generation
- **Duration** : 1 month – July 2025 | Sousse, Tunisia
- **Project** : This internship involved developing a platform to automate test case generation from Functional Specification Documents (FSD). I created a pipeline to split FSD files, perform semantic indexing in Elasticsearch using Google Gemini embeddings, and generate test cases via AI prompts. An Angular frontend managed files, modules, and test cases, while backend development with Django and semantic search optimized validation and testing processes at Proxym-IT.
- **Technologies** : Python, Django, Elasticsearch, Angular, Google Gemini, AI (Generative Models)

- **Internship at Proxym-IT**

- **Title**: Analysis and Reporting on Project Progress via Git and Elasticsearch
- **Duration** : 1 month – August 2024 | Sousse, Tunisia
- **Project** : This project enhanced the management and analysis of development operations data by integrating GitHub with Elasticsearch. Fuzzy queries improved search and statistical analysis, while optimized data transfer and semantic search functions provided detailed insights through analytics dashboards, enabling better project monitoring and evaluation.
- **Technologies** : Git, GitHub, Elasticsearch, Python, cohere, AI (Generative Models)

## PROJECTS

- **Classroom Reservation Management System for Department Heads**

- **Project** : Development of a web application enabling department heads to manage classroom reservations for professors according to specific time slots. The system also allowed professors to submit reservation requests and receive real-time notifications through WebSockets, ensuring efficient communication and scheduling within academic departments.
- **Technologies**: React , bootstrap, Redux, Spring Boot, PostgreSQL, WebSockets

- **CarCare App – Automotive Appointment Scheduling**

- **Project** : Design and implementation of a scheduling platform for automotive dealerships, allowing clients to book services online with integrated time-slot management. The solution improved customer experience while optimizing workshop resource allocation.
- **Technologies**: React, Redux, Django, PostgreSQL,

- **Thesis Defense Management System( Classroom Distribution System)**

- **Project** : Backend development for an intelligent scheduling system allocating classrooms for thesis defenses. A genetic algorithm optimized room distribution while considering teacher availability and constraints. Exposed via a REST API and integrated with a React frontend for efficiency.
- **Technologies** : Python, Django, REST API, Algorithme Génétique ,React, Redux

- **E-commerce Web App**

- **Project** : Creation of an e-commerce platform with functionalities for user management, product catalog browsing, and shopping cart operations. The project focused on delivering a scalable architecture for online retail.
- **Technologies**: Django REST Framework, React, Bootstrap

- **Portfolio Web Site**

- **Project** : Development of a personal website to showcase professional projects, skills, and achievements in web development, designed with a clean and responsive user interface.
- **Technologies** : React, tailwind CSS