Haithem SBOUI

Software Engineer

Dresden, Germany

📞 +49 17630595395 ✉ contact@haithem-sboui.me 🌐 haithem-sboui.me

Professional Experience

EFFIOS 🌐   **Mars 2024 – Mars 2025**

Software engineer

- Developed a **Single Sign-On** access management system with role-based access control and granular permissions. integrating it across multiple client applications
- Implemented a **batch import** feature with detailed report generation.
- Added a synchronization verification and correction feature.
- Implemented new features and improvements, including **dynamic configurations** management, projects assignment eligibility using **Query Builder**.
- Fixed bugs and errors to improve system reliability and user experience.
- Implemented **integration tests** to ensure system stability and prevent regressions.
- Developed and deployed **Airflow DAGs** to automate data synchronization between a source database and its replica.
- Built an **end-to-end data visualization pipeline** integrating **Matomo analytics**, **Apache Kafka** (data streaming), **Apache Druid** (real-time OLAP), and **Superset** (BI), designing interactive dashboards with dynamic filters and granular visualizations.
- **Technologies/Tools: JavaScript (Vue.js, Vuex), Python (Flask), PHP, OOP, Databases (PostgreSQL, MySQL, MariaDB, Apache Druid), Gitlab CI/CD, Docker, Linux, Agile (Scrum)**

Projects

ERP-COMMERCIAL   **Dec 2024 – Mars 2025**

Coding BeTounsi

- Contributed to the proof of concept **(PoC)** development of a SaaS by developing core system features, including **dynamic field updates** and **automatic recalculations for prices, taxes, and discounts.**
- **Led** database design and backend development, while utilizing **Odoo** to streamline **team management**, **task assignments and costing** under the mentorship of ABDERRAOUF GHRISSI 🔗.
- Leveraged TypeScript for **type safety**, **DOM manipulation, and event handling** to enhance interactivity and **user experience**, adding features to facilitate seamless data selection, including a right-click menu with options like **exporting** data to Excel.
- Contribute to the built of a **real-time PDF template editor** for customizable **printable client documents** (e.g., invoices, quotes).
- **Technologies/Tools: TypeScript (Angular), Primeng, Python (FastAPI), HTML, CSS, UI/UX, PostgreSQL**

Point of Sale System   **March 2024 – May 2024**

Side project

- Designed the database and implemented authentication, employee management, and **an optimized batch import** for CSV/Excel in a point-of-sale system.
- Mentored by Mahdi Cheikhrouhou 🔗, who provided guidance on best practices and architectural decisions.
- **Technologies/Tools: Python (FastAPI), PostgreSQL**

ATHAR 🌐   **Feb. 2022 – Jun. 2022**

End-of-Studies Project - RegimLab - National School of Engineers of Sfax 🌐

- Designed ATHAR: A mobile application to promote archaeological sites in Tunisia.
- Created the "AR Reconstruction" service: Immersion of 3D models using Augmented Reality (AR).
- Developed a virtual guide with a new and advanced perspective using AR.
- Created a 3D catalog to facilitate the exploration of supported archaeological sites.
- **Technologies/Tools: Flutter, Firebase, Unity 3D, Augmented Reality**

Academic Projects

Car Paradise ⦿
Dec 2023 – Feb 2024

Academic project

- Developed a comprehensive car rental management system with features including customer and vehicle management, booking automation, and PDF invoice generation
- **Technologies/Tools: Angular, Spring Boot, Spring Security, MySQL**

MeetME ⦿
Nov 2023 – Jan 2024

Academic project

- Developed two versions of an online meeting organization website: one with PHP (Symfony) and the other with Spring Boot and Angular.

DevOps: Pipeline CI/CD ⦿
Jan 2024

Academic project

- Perform implementation, unit tests, and deployment through a CI/CD pipeline on Gitlab
- **Technologies/Tools: Azure VM, Gitlab CI/CD**

Education

Schmalkalden fachhochschule
Apr. 2025 -– Present

Student in Computer science
Schmalkalden, Germany

TEK-UP University
Sep. 2022 – Mars 2025

Master in Software and Information System Engineering
Ariana, Tunisia

Higher Institute of Computer Science Mahdia
Sep. 2019 – Jun. 2022

Bachelor in Computer Science
Mahdia, Tunisia

Achievements / Extracurricular

TCPC (Tunisian Collegiate Programming Contest)
sept 2024

Competitor

∗ Participated in the prestigious national-level programming competition where I, along with two teammates, enhanced our problem-solving and competitive programming skills. This event gathers top talent from universities across the country.
∗ **Language: C++**

Google Developer Student Clubs - Mahdia
July 2021 – Jun 2022

Organizer - Content Creator

∗ Ranked 1st in Tunisia and 3rd in the Middle East North Africa region, achieved through significant teamwork efforts.
∗ Enhanced key soft skills during this experience, notably improving communication and teamwork abilities. Additionally, acquired proficiency in Adobe Suite.