Software Engineer Intern

Ghanaj Ayoub, 22

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ayoubg.demo-system.top

Ambitious software engineering student in the Master's Intelligent and Mobile Systems, currently looking for an end-of-study internship in Morocco, to start in February 2025. Having done some projects revolving around software development, AI, and data science, I am very excited about bringing all these skills into valuable projects.

Technical Skills

Programming Languages	Python, Java, JEE (Spring Boot, JPA), C, C++, C# (.NET, ASP), JavaScript, NodeJS, PHP, SQL (PL-SQL, T-SQL), Tailwind CSS, Bootstrap, TypeScript, Dart, Flutter, Bash
ML & Data Science	PyTorch, Keras, Scikit-learn, NumPy, Pandas, Matplotlib
Web Servers	NGINX, Apache
Markup Languages	HTML, XML
Databases	MySQL, MongoDB, SQL Server, Oracle, PostgreSQL, SQLite
Web/Android Development	Android Studio (Java), Flutter, React Native, Ionic, Android SDK, PHP (Laravel), JavaScript (jQuery, React, NextJS, Angular, Vue.js), Flask, Django, ORM (Prisma, Drizzle, JDBC), Bulma, Shadcn, Aceternity
Desktop	JavaFX, Tkinter, ADO.NET, .NET Framework, Swing, WinForms, WPF
Operating Systems	Windows (PowerShell), Ubuntu (Bash), Linux/Unix, ESXi
Architectures & Protocols	SOA (SOAP, RESTful), TCP, UDP, SSH, HTTP, SFTP
Virtualization	Docker (Dockerfile, Docker Compose), VirtualBox, VMware, ESXi
Software Tools	Visual Studio, Android Studio, PyCharm, Git, Power AMC, VS Code, Photoshop, VIM, Apache Tomcat, Eclipse, NAS, Vite, NuGet, Postman, Vercel, WordPress, Figma, Adobe Illustrator, MATLAB
Project Management	Kanban, SCRUM, Agile methods, Linear
Communication	French (native), English (C2)

Education

Master's Degree (M2) in Intelligent and Mobile Systems   October 2023 - Present
Sidi Mohamed Ben Abdellah University (USMBA) — Fez, Morocco
    Relevant coursework: Artificial Intelligence, Machine Learning, Data Science, Big Data, Distributed Architectures, IoT, Cross-Platform Mobile Development, Information Security, Virtualization, Augmented Reality, Semantic Web

Bachelor's Degree in Web Technologies and Programming   September 2022 - July 2023
Cadi Ayyad University (UCA) — Marrakesh, Morocco
    Relevant coursework: Software Engineering, Java Programming, JavaEE Web Development, PHP Development, Database Administration (Oracle), Information Systems, Modern Web Development, Systems & Networking

Advanced Technical Diploma in Software Development September 2020 - July 2022
Office of Vocational Training and Employment Promotion (OFPPT) — Marrakesh, Morocco
Relevant coursework: OOP, Algorithm Design, Event-Driven Programming, Object-Oriented Analysis &
Design, Full Stack Web Development, Database Management (SQL), Desktop & Mobile Application Development

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Experiences

Full-Stack Web Developer April 2023 - June 2023
EKBlocks — Marrakech, Morocco

- Designed and developed a Client and Legal Case Management System using Django Rest and React.
- Implemented features for managing legal cases, including case details, court information, important dates, and associated documents or evidence.

Full-Stack Web Developer July 2022 - September 2022
SEOCOM — Summer Internship — Marrakech, Morocco

- Designed and developed a custom system using Laravel, improving efficiency and reducing costs for the company.
- Deployed the system on the cloud, enhancing scalability and reducing infrastructure costs.
- Monitored the system for quick issue resolution, improving availability and reliability.

Full-Stack Web Developer February 2022 - April 2022
ISGI — Marrakech, Morocco

- Designed, developed, and implemented a dynamic web application using PHP, Laravel, HTML, CSS, JavaScript, and MySQL.
- Delivered an interactive solution for hardware systems management.

Projects

Papyrus — Desktop Application — Academic Project

- Created a library management desktop application to streamline everyday processes and improve service delivery to the readers.
- Implemented a secure access system and a user-friendly interface, integrating real-time statistical reporting.
- Stack: Java, JavaFX, SQLite

Tawqiti — Web Application — Academic Project

- Developed an online platform for managing faculty schedules to ease scheduling, oversee faculty responsibilities, and ensure effective task distribution and time management.
- Built a resilient, real-time data management system with a responsive user interface.
- Stack: Spring Boot, JPA, PostgreSQL, Angular, TailwindCSS

Next.js Web GUI for IoT Smart House USP32 + Detectors

- Designed and deployed a scalable web interface for IoT Smart Home Systems using Next.js.
- Dockerized both NGINX and the Next.js application for streamlined deployment and scalability.
- Self-hosted and configured the system from scratch, optimizing for performance and security.
- Developed a customized WebServer in C for efficient communication between devices and the web interface.
- Implemented robust API handling in C for real-time data exchange with IoT detectors.

Desktop Application (Java JFX) – Library Management System

- Designed and developed user-friendly interfaces using Java JFX for library staff and patrons.
- Managed an SQLite database for efficient inventory, member records, and lending operations.
- Implemented fast search and filtering for records, enabling quick access to books, members, and transactions.
- Ensured data integrity and user-friendliness with robust validation and error handling mechanisms.

Node.js Web Application (Express.js) – Live Chat App

- Built dynamic user interfaces for real-time chat using Socket.IO for seamless communication.
- Administered MongoDB for efficient data storage and retrieval of chat histories and user profiles.
- Developed a robust backend using Express.js, ensuring scalable real-time messaging.
- Dockerized the application and deployed it on a VPS, ensuring reliability and uptime.
- Continuously monitored and maintained the application for performance, security, and availability.

Angular Web Application

- Designed responsive user interfaces with Angular and Tailwind CSS, focusing on UI/UX optimization.
- Developed server-side logic with Spring Boot for smooth backend integration.
- Enhanced application performance and user experience through effective state management and component reuse.
- Utilized JPA for seamless database interactions and reliable data persistence.