



KENZA ABOU-EL KASEM

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Profile

With a solid foundation in software engineering and a passion for problem-solving, I excel at turning challenges into opportunities for innovation. My goal is to design intelligent, sustainable digital solutions that balance performance, creativity, and automation. I am currently seeking a PFA internship to apply my technical expertise and collaborative mindset to deliver meaningful, high-impact results.

Technical Skills

- Programming Languages:** Java, Python, JavaScript, TypeScript, C, C++, C#, SQL
- Frontend:** React, Next.js, Vue.js, Tailwind CSS, Bootstrap
- Backend & Frameworks:** Spring Boot, Spring Cloud, Flask, Node.js, REST APIs, GraphQL, Microservices
- DevOps:** GitHub Actions, Jenkins, Docker, Kubernetes
- Databases:** PostgreSQL, MySQL, Oracle SQL, MongoDB
- Testing & QA:** JUnit, Selenium
- Machine Learning & Data Science:** TensorFlow, Scikit-learn, OpenCV, Pandas, NumPy, Data Preprocessing
- Data Analytics:** Power BI, Looker
- Tools & Methodologies:** Git, GitHub, Jira, Agile/Scrum
- Design & UI/UX:** Figma, Adobe Illustrator, Canva, Wireframing
- Virtualization:** VMware, VirtualBox, Network Configuration

Soft Skills

- Project Management and Agile Methodologies:** Effective team coordination, sprint planning, and deadline management using the Scrum methodology.
- Communication and Leadership:** Ability to motivate teams, resolve conflicts, and convey complex technical ideas clearly and concisely.
- Adaptability and Problem Solving:** Proactive approach in identifying needs, finding innovative solutions, and adapting to fast-changing projects.

Extracurricular Activities

- Club CSC ENSAT – AI Cell Manager**
- Led introductory AI support training courses, provided project mentoring, and supported members in their work.
 - Organized problem-solving events, conferences, workshops, and project pitch sessions.
- Club TGD ENSAT – Team Leader**
- Orchestrated debates, round tables, and organized training courses.

Certifications

- Master Microservices with Spring Boot and Spring Cloud**
Udemy – Java Spring Boot Microservices 5-in-1 : Spring Boot, Spring Cloud, Docker, Kubernetes, REST API
- DevOps : Beginner to Advanced**
Udemy – Jenkins, Docker, Kubernetes, AWS, Terraform, Ansible, Maven, Bash, Vagrant, CloudFormation

Languages

- | | |
|------------------------|-----------------|
| English – Professional | Spanish – A2 |
| French – Bilingual | Arabic – Native |

Education

- Diploma in Software Engineering**
National School of Applied Sciences of Tangier
Expected Graduation: June 2026

Experience

- AI research Intern – CHU Tangier**
March 2025 – Present
- Developed an AI-powered application for automated pneumonia diagnosis from chest X-ray images using deep learning techniques.
 - Designed and implemented a high-accuracy CNN model, leveraging Transfer Learning with pretrained architectures (ResNet, EfficientNet) to improve performance.
 - Deployed the application using Flask/Streamlit and containerized it with Docker for scalability, ensuring compliance with medical data privacy standards.
- Intern at the Information System Dept – Renault Group Tangier**
June 2024 – July 2024
- Automated and optimized quality analysis processes by digitizing defect collection using Demeter and modeling dynamic KPIs with Power BI and Looker.
 - Contributed to an applied AI project focused on automatic detection of crosswalks in factories, enhancing the YOLO model for improved accuracy and performance.

Projets

- Cookly – Application Mobile de Recommandation de Recettes**
February 2025 – March 2025
- Developed a mobile platform with Next.js and React Native allowing users to discover recipes based on available ingredients or nutritional goals.
 - Implemented an intelligent search engine with advanced filters (diet, calories, etc.) and suggestions powered by AI models (like GPT).
 - Managed data with MongoDB for structured storage and real-time updates.
- Ecocrops: Digital Platform for Sustainable Agriculture**
December 2024 – February 2025
- Aimed to help farmers plan crops and adopt sustainable farming practices by integrating AI and intuitive dashboards.
 - Developed a user interface with React.js and integrated APIs for AI model connections.
 - Ensured reliability and robustness of functionalities through integration testing with JUnit and Postman.
 - Created a CI/CD pipeline with Jenkins for automated testing, application containerization, and continuous deployment.
- Explore Morocco: Intelligent Tourism Assistant**
November 2024 – December 2024
- Modernized Moroccan tourism with interactive and intelligent tools tailored to visitors and major events.
 - Coordinated Agile sprints via Jira, ensuring efficient and collaborative feature delivery and created test plans using Xray.
 - Developed a responsive interface with React.js, integrating a chatbot and interactive maps.
 - Implemented automated testing with JUnit and Selenium and CI/CD with GitHub Actions, deployed with Kubernetes.
- Optimizing Maintenance of Industrial Water Pumps**
October 2024
- Improved maintenance efficiency and reduced operating costs of industrial water pumps.
 - Developed and trained an LSTM model for failure prediction based on historical sensor data.
 - Implemented a genetic algorithm to optimize maintenance intervals and sensor thresholds, minimizing failure-related costs