

Abdelaziz Barhoumi

Software Engineering Student | Full-Stack Developer | Project Leader
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Summary

Second-year software engineering student with a passion for building innovative tech solutions. Transitioned from mechanical engineering to pursue expertise in coding, full-stack development, and system design. Proven leadership in managing teams, organizing high-impact projects, and delivering scalable applications. Skilled in PHP, Python, C, and web development, with certifications from Coursera and TryHackMe. Eager to contribute technical proficiency and problem-solving skills to dynamic software engineering roles.

Projects

Digital Transformation Readiness (DTR) Platform

- Laravel platform assessing organizational digital maturity using SIRI/CoSIRI with AI recommendations.
- Multi-role authentication, auto-save assessments, multilingual interface, automated HTML report generation.
- Tech Stack: Laravel 12, PHP 8.4+, MySQL, Tailwind CSS, Alpine.js, Gemini AI.

InternNexus – Internship Portal Web Application

- Developed a Laravel-based web platform for discovering and applying to internships, featuring advanced search, category filtering, and dynamic listings.
- Designed friendly interface with modular Blade components and integrated pagination for seamless browsing.
- Tech Stack: Laravel (PHP), MySQL, Blade, Tailwind CSS, JavaScript.

Task Tracker Web Application

- Developed a PHP-based web app with user authentication, note management, and middleware routing.
- Implemented modular architecture and integrated database for efficient data handling.
- Tech Stack: PHP, MySQL, HTML, CSS, JavaScript.

EleganceEdge E-Commerce Platform

- Built a responsive e-commerce website with product browsing, cart functionality, and secure authentication.
- Ensured dynamic content rendering and user-friendly design.
- Tech Stack: HTML, CSS, JavaScript, PHP, MySQL.

Smart Home Automation System

- Collaborated on a team project integrating hardware and an Android app using MIT App Inventor.
- Enabled remote control of home appliances, improving convenience and energy efficiency.
- Tech Stack: MIT App Inventor, Microcontrollers.

Smart Bin System

- Designed a waste management system with sensors and microcontrollers for automated operation.
- Provided real-time feedback to optimize waste collection.
- Tech Stack: C, Microcontrollers, Sensors.

Hand Gesture Recognition System

- Created a real-time system using computer vision to classify hand gestures with audio feedback.
- Demonstrated machine learning integration during a hackathon.
- Tech Stack: Python, Machine Learning.

Education

Bachelor's Degree: Software Engineering - EPI - International Multidisciplinary School By 06/2026

- Top-performing student in software engineering courses, excelling in programming and system design.
- Actively developing projects in web and mobile application development.

Business Intelligence Program - Pristini School of AI 05/2024

- Gained expertise in data analysis and visualization for business applications.

Bachelor of Science: Mechanical Engineering - Sudan University of Science and Technology 03/2023

- Developed strong analytical and problem-solving skills, later applied to software engineering.

Work Experience

Competition Manager, "FURSAN" Content Creation Competition November 2022 - April 2023

Faras Sudan, Khartoum, Sudan

- Led a team to manage a nationwide competition with 3,600 registrants, selecting 40 finalists and 5 winners.
- Oversaw website development and coordinated schedules, ensuring seamless project execution.
- Enhanced organizational and leadership skills under tight deadlines.

Branch Manager October 2022 - December 2022

Youth House Training Center, Khartoum, Sudan

- Supervised operations at a training center, managing facility needs and supporting youth development programs.
- Streamlined processes to improve efficiency and participant experience.

Branch Manager May 2022 - September 2022

Leadership Creativity Camp, Khartoum, Sudan

- Managed course content, marketing, and student registration for a soft skills training program for children.
- Coordinated teacher schedules and payroll, ensuring operational success.

Organizer February 2022 - March 2022

Hult Prize Foundation, Khartoum, Sudan

- Planned and executed events for a global entrepreneurship competition, enhancing teamwork and event management skills.

Volunteering

Official ORG (Takaful Charitable Organization), Khartoum, Sudan

May 2022 – Present

Officer, Evaluation and Follow-up Office

- Developed a system to manage sponsored family details, increasing monthly guarantees by over 500%.
- Contributed to website development for family data tracking.

VMC Program, Khartoum, Sudan

March 2022 – March 2023

Manager, General Membership Program

- Managed 1,500 members, overseeing subscriptions, archiving, and communication.
- Organized three training workshops on volunteering, coordinating logistics and content.

Mechatronics Engineering Inventors (MEI), Khartoum, Sudan

December 2021 – April 2023

Finance Manager

- Managed funds, developed financial plans, and attracted sponsorship for engineering projects.
- Prepared expenditure schedules and optimized resource allocation.

Youth Consultant Conference, Khartoum, Sudan

Apr 2022 - May 2022

Logistics Coordinator

- Coordinated attendee logistics, ticket verification, and hospitality for 1,500 attendees.
- Ensured seamless event execution and attendee satisfaction.

Certifications

- **Pre Security** – TryHackMe, August 2024
- **Introduction to Data Science** – IBM, September 2023
- **Introduction to Artificial Intelligence** – IBM, November 2023
- **Programming for Everybody (Python)** – University of Michigan, December 2023
- **C for Everyone: Programming Fundamentals** – UC Santa Cruz, December 2023
- **Linux Fundamentals** – LearnQuest, December 2023
- **Managing Linux Users & ACL Permissions** – Coursera, December 2023
- **Create User Directory with Linux Commands** – Coursera, December 2023
- **Introduction to Hardware and Operating Systems** – IBM, December 2023
- **Finding Your Professional Voice** – University of London, November 2023
- **Leadership Training Program** – Takaful Charitable Organization, January 2023

Skills

- **Programming:** PHP, Python, C, JavaScript, HTML, CSS, Java
- **Frameworks & Tools:** Laravel, MySQL, MIT App Inventor, OpenCV, Excel
- **Technologies:** Web Development, Database Management, Computer Vision, Microcontrollers
- **Soft Skills:** Leadership, Project Management, Team Coordination, Problem-Solving
- **Languages:** English (Fluent), Arabic (Native), French (Elementary), German (Elementary)