MOHMAED ABUBAKER

Software Engineer

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📞 +(971)522929436 **Github**, **Linkedin**, **Portfolio**

PROFESSIONAL SUMMARY

Full-stack Software Engineer with over 3+ years of experience in Python, Flutter, SQL, AI/ML, JS, and IoT. Proven track record in designing scalable architectures and developing secure APIs for healthcare, robotics, and automation projects.

EXPERIENCE

FULL STACK ENGINEER
TECWAY, DUBAI, UAE

Dec 2024 – Present

- Led end-to-end development and optimization of 4+ cross-platform applications using Flutter, PyQt6, and JavaScript, improving product engagement by 25% through enhanced UI/UX and optimized performance.
- Architected and implemented secure backend APIs and ETL automation pipelines for large-scale data cleaning, transformation, and business logic processing, reducing manual processing time by 40%.
- Rewrote inefficient database queries and implemented caching optimizations, reducing key operation latency from several seconds to under 100 ms, significantly improving user experience and engagement.
- Incorporated advanced machine learning models via Google Gemini APIs and custom training pipelines, enabling real-time personalization and increasing user session duration by 35%.

SOFTWARE ENGINEER
CARETTA ROBOTICS, FAMAGUSTA, CYPRUS

Nov 2024 – Apr 2025

- Improved object detection precision by 12% through MobileNet model retraining.
- Reduced ROV command latency 15% via real-time control system optimization.
- Consolidated sensor streams from 5+ sources for accurate 3D environmental mapping.

SOFTWARE ENGINEER INTERN
CARETTA ROBOTICS, FAMAGUSTA, CYPRUS

Jun 2024 – Oct 2024

- Optimized computer vision pipelines for faster object detection and classification.
- Processed 26,000+ sensor entries, increasing ML model accuracy by 20%.
- Enhanced 3D SLAM system with multi-sensor fusion for better navigation.

SOFTWARE DEVELOPER FREELANCER
SELF-EMPLOYED, KHARTOUM, SUDAN

Nov 2022 – Jun 2024

- Led a team of 4 to deliver mobile & automation solutions 25% faster than projected.
- Oversaw the full software lifecycle, coordinating across design, data, and engineering teams to deliver scalable, high-quality products on schedule.
- Developed Flutter apps with Firebase, improving performance by 20%

Projects

Docline
Tech Stack: Dart, Flutter, Supabase, FCM, APN, Google Analytics.

May 2025 – Oct 2025

- Engineered a responsive cross-platform telehealth mobile application to connect doctors in the Gulf region with patients in Sudan targeting to improve the health sector by 20%.
- Crafted a modular system to manage 100+ weekly appointments, enable real-time chat and video calls, and support a custom EHR system compliant with industry standards, resulting in a 30% increase in operational efficiency.

MD ASSISTANT
Tech Stack: Python, PyQt6, Pandas.

Apr 2025 – May 2025

- Architected a modular ETL pipeline that processed over 5,000+ Excel/ODS records, automating data transformation and normalization with 98% accuracy using intelligent record reconciliation logic.
- Prepared the system for API integration with hospital databases, reducing future migration time by 40% and enabling scalable transition to a cloud-based architecture.

SKILLS

Programming languages:
Dart, JavaScript, TS, Python, SQL.

Frameworks & Tools:
Flutter, FastAPI, React, Next.JS, Node.js, PyQt6, Tailwind CSS.

Backend & Cloud:
AWS, Supabase, Firebase, PostgreSQL, Docker, RESTful APIs, CI/CD (GitHub Actions).

AI/ML & Data:
Pandas, NumPy, Scikit-learn, TensorFlow, YOLOv5, OpenCV.

Other Skills:
Microservices, GitHub, Agile, Scrum, API Security, ETL Pipelines, Real-Time Systems.

Languages:
Arabic: Native.
English: Professional.

EDUCATION

Eastern Mediterranean University, Famagusta, North Cyprus (EMU)
B.Sc in Electrical and Electronic Engineering (Honours Student)
GPA: 3.06/4.00

AWARDS AND CERTIFICATIONS:

1. **OpenEDG Python Institute:** Programming with Python Professional Certificate Link

2. **IEEEXTREME 18.0 competitor** ranked 2nd in the country and 597th in the region, IEEEXtreme, IEEE.

3. **Best Graduation Design** Project of the Fall 2024-2025 semester, Electrical and Electronic Engineering, EMU.

4. **Flutter Development Course**, Google Developer Student Club, University of Khartoum Branch, Google.