MONZIR HAFEZ

Riyadh - Saudi Arabia

+966552360857 - muntherhafiz474@gmail.com - **Github profile** - **Portfolio Web Page**

SUMMARY

Software engineer experienced in AI-powered applications, backend systems, and mobile/web interfaces. Skilled in integrating machine learning models, building scalable APIs, and delivering end-to-end solutions from data to deployment.

EDUCATION

Bachelor of Science in **Software Engineering** - **University of Khartoum**, Sudan

WORK EXPERIENCE

Software Engineer, IFuture Studios   **Aug 2023 - Mar 2024**

- Integrated Nakama backend into an online game, including hosting architecture design.
- Developed PocketBase backend with database schema for VR project user data and payment logs.
- Built a mobile AR game in Unity from concept to deployment.

Game Developer, Ctrl-A Studios   **Mar 2022 - May 2022**

- Served as online games specialist, ensuring smooth multiplayer functionality.
- Delivered 8+ games in under 3 months, meeting tight deadlines without sacrificing quality.

PROJECTS

Sikka Transport Guide - Code for Sudan Competition

- A cross-platform app with Flutter and custom backend for optimized Sudan public transport routes.
- Created a GraphHopper routing engine using custom GTFS from manually mapped routes.
- Built a user-friendly map interface with Arabic labels and interactive map.

Crypto Analyzer Bot - Freelancing

- Built a Telegram bot for real-time crypto market analysis, charts, and news sentiment.
- Integrated CoinGecko, CryptoCompare, and TA-Lib for technical and fundamental analysis.
- Delivered multi-language (EN/AR) interactive trading tool with Dockerized deployment.

Passport Photo Enhancer (Real-ESRGAN) - Freelancing

- Fine-tuned Real-ESRGAN on FFHQ to enhance low-quality passport/ID facial images.
- Delivered high-fidelity image restoration for governmental and archival use cases.

RoboFly – Reinforcement Learning - Personal Project

- Developed an RL agent in TensorFlow integrated with a real-time Godot 4.2 game via socket communication.
- Designed custom reward functions and optimized training loops, achieving a best agent score of 266.
- Applied model architecture tuning and state optimization to significantly improve learning performance.

SKILLS

Development

- Frontend mobile/web (Flutter), backend (Node.js, Flask).

AI & Data

- Deep learning (PyTorch), computer vision (OpenCV), database design.

Tools & Platforms

- Firebase, GitHub, REST APIs, real-time sockets, cloud hosting.