Muhammad Ebrahim Masoud Nouh

Software Developer

mebramasoud@gmail.com | 01098384618 | LinkedIn: linkedin.com/in/muhammad-masoud-24bbb81ba

Professional Summary

A motivated Computer Science graduate with a solid foundation in programming, software development, and problem-solving. Seeking an entry-level role to utilize my technical skills and contribute to innovative solutions while advancing my professional growth.

Education

Bachelor's Degree in Computing and Information Technology at Arab Academy for Science, Technology & Maritime Transport. (2019-2023)
Major: Computer Science.
Minor: Software Engineering.

Full Stack Web Development Using Python | At Information Technology Institute (March 2025 – June 2025)

- Currently enrolled in a comprehensive software development specialization, focusing on Python frameworks (Django, Flask), Web Development, Database Systems, and Software Engineering best practices.
- Completed Ubuntu Linux Essentials course.

Technical Skills

- Programming Languages: Python, C++, C, javaScript.
- Web Development: HTML5, CSS3, Bootstrap, jQuery.
- Database Systems: SQL, PostgreSQL, Oracle.
- Tools & Technologies: Unity, Android Studio, Linux, github.
- Other Skills: Object-Oriented Programming, Debugging, Problem-Solving.

Projects

Fall Detection System Using Convolutional Neural Networks (CNN)

- Developed a Fall Detection System leveraging Convolutional Neural Networks (CNN) to identify and classify fall incidents.
- Collected and preprocessed video and sensor data to train the model for accurate fall detection.
- Utilized Python and libraries such as TensorFlow for model development and training.
- Designed a user-friendly interface to alert caregivers or emergency services upon detecting a fall.
- Achieved a high detection accuracy through model optimization and testing on diverse datasets.
- Focused on enhancing the system's reliability and minimizing false positives for real-world deployment.

Software Engineer Internship for ROVs at VORTEX Robotics

- Designed and developed control systems for Remotely Operated Vehicles (ROVs) using Pixhawk, Raspberry Pi, and Arduino.
- Implemented advanced image processing techniques for ROV operations.
- Worked extensively with Robot Operating System (ROS) to enhance autonomous navigation and control.
- Played a key role in the team's participation in the **MATE ROV Competition**, taking responsibility for ROV control systems.

Weather Dashboard Application

Full-Stack Web Development Project

- Developed a responsive weather application with real-time data using OpenWeatherMap API.
- Implemented user authentication (login/registration) with localStorage for session management.
- Created an interactive dashboard featuring current weather, hourly/daily forecasts, and weather maps.
- Designed a dynamic UI with dark/light mode, unit conversion, and customizable dashboard elements.
- Integrated Leaflet.js for interactive weather maps with multiple layers (radar, temperature, wind).
- Built location-based services with geolocation API and reverse geocoding.
- Developed weather alerts, clothing recommendations, and activity suggestions based on conditions.
- Technologies: HTML5, CSS3, JavaScript, Leaflet.js, Bootstrap, REST APIs.

Music Application

- Designed and developed a music application using Firebase for real-time database and user authentication.
- Implemented features such as user registration, login, and personalized music playlists.
- Utilized JavaScript for the frontend interface and integrated Firebase's authentication module for secure user access.
- Focused on creating an intuitive and responsive user interface to enhance user experience.

2D Platformer Game (Unity)

- Developed a basic 2D platformer game using **Unity** and **C#** scripting.
- Designed and animated simple game characters, obstacles, and levels.
- Implemented basic game mechanics, such as player movement, collision detection, and scoring.

Languages

- **Arabic**: Native
- **English**: Fluent