# **Omar Afifi**

#### **₽** Profile

Ambitious and versatile Computer & Systems Engineering student with a range of skills in web development, mobile app development with Flutter, IoT, and embedded systems. Experienced in creating web applications, designing responsive websites, and building mobile apps for both Android and iOS. Proficient in modern programming languages and frameworks, with a passion for developing innovative and scalable solutions. Committed to delivering highquality results with a proven track record of addressing complex technical challenges, from smart irrigation systems to user-friendly interfaces.

### Skills

- C | C++ | Java | JavaFX | Python (Programming Languages)
- Web Development (HTML, CSS, JavaScript, Node.js)
- Mobile Development (Flutter)
- Embedded Systems (Arduino, ESP32, IoT, PCB Design)
- Tools & Platforms (Git, GitHub, PuTTY, VS Code, Android Studio, IntelliJ, NetBeans, PyCharm, Protus, Fritzing)
- Microsoft Office (Word, Excel, PowerPoint, Access, Outlook)
- Adobe Creative Suite (Photoshop)
- Video Editing (CapCut, Premiere Pro)
- Project management and organization
- Effective communication and teamwork

## **Education**

### **B.Sc. in Computer & Control Systems Engineering**

Zagazig University 2022 – 2027 | Zagazig, Egypt

## ( Languages

Arabic | English

## Professional Experience

#### **ZagSystems**

Software Engineer Intern 06/2024 - Current | Sharqia, Egypt

## Projects

#### Omar Afifi 🛮

Portfolio Website

- Building a portfolio website to showcase projects, skills, and accomplishments using HTML, CSS, JavaScript, and Node.js.
- Focuses on delivering a modern, clean design with animations, responsive elements, and an optimized user experience.

#### Z-Garden 🖸

IoT-based Smart Irrigation System

- Monitors air temperature, humidity, soil moisture, liquid temperature, water TDS, and pH.
- Activates irrigation based on adjustable soil moisture thresholds and prevents pump damage if the tank is empty.
- Powered by 18V solar cell, battery (up to 20 hours), or adapter; includes dual USB ports.
- Real-time data access via iOS, Android, web, and local LCD display.
- Features automated pump control, extended battery capacity, modular design, and extendable Wi-Fi range.

### Digging Jim 🛮

Interactive Game

- Designed and developed an interactive game "Digging Jim" using Java and JavaFX, featuring engaging gameplay mechanics and user interfaces.
- Implemented real-time game updates, animations, and game logic to enhance player experience.
- Focused on optimizing game performance and integrating user-friendly controls.
- Technologies used: Java, JavaFX, Game Development Principles.