# **Ibrahim Mohamed**

+20-155-230-2441 • Cairo, Egypt

ibrahim,mohamed.abdelsadek@gmail.com & LinkedIn & GitHub & Website

### **SUMMARY**

A well-rounded Software Engineer combining academic studies, hands-on technical knowledge, and interpersonal skills. Pursuing a Bachelor's degree in Computer Science. Passionate about learning new technologies and exploring them in depth. Curious and adaptable, with a strong desire to understand concepts thoroughly and apply them effectively. A fast learner with proven ability to communicate technical concepts clearly and collaborate effectively with teams.

#### **EDUCATION**

Bachelor of Computer Science, Ain Shams University.

Oct 2022 - June 2026 (Expected)

• **Relevant Courses:** Analysis & Design of Algorithms, Data Structures, OOP, Database, Artificial Intelligence, and Technical Writing, Networks.

#### **SKILLS**

**Technical Languages** Python, C++, C, Java, Bash, SQL, JavaScript, Rust (familiar), Go/Golang (familiar)

**Technical Skills** OOP, Data Structures, Algorithms, Networking, Databases, Operating systems, Git,

GitHub, GitHub Actions, Linux (WSL), Redis, Postgres, AWS, Docker

**Soft Skills** Communication, Planning, Presenting, Public Speaking, Open-mindedness, Curiosity,

Flexibility, Fast Learning, Documentation, Troubleshooting, Teamwork, Leadership

**Languages** Arabic (Native), English (Good)

## **EXPERIENCE**

### **Software Contributor**

July 2024 - Present (Remote)

- Collaborated on improving accessibility for Synfig across Linux distributions using bash scripts.
- Contributed to discussions around ensuring code quality and maintainability, with a focus on unit tests and code documentation.
- Actively contributed to open-source projects, ensuring seamless integration and system compatibility.

## **PROJECTS**

QuestBoard. Full-stack Flask app for weekly coding challenges with live leaderboard. GitHub Repo

• Built end-to-end challenge flow: user auth (JWT), submission upload/verification, scoring, and a live leaderboard served both server-rendered pages (Jinja2), REST endpoints for integrations and fully Dockerized and prepared for AWS deployment.

**FOS (Faculty Operating System).** Teaching operating system implemented mainly in C (with some Assembly) to explore core OS concepts. GitHub Repo

• Implemented kernel components in C/ASM, worked with the GNU toolchain and emulators/debuggers (QEMU) to run and test the OS, and wrote/documented lab exercises or examples for learning OS internals.

**Data-Communication-Project.** C# client–server application implementing TCP socket messaging and basic protocol features. GitHub Repo

• Built both client and server components to demonstrate reliable message exchange over TCP; implemented core protocol features (connection handling, message framing/commands, and simple messaging semantics) and exercised networking fundamentals such as serialization, error handling, and testing.

**Speaker-Identification.** C# WinForms speaker-identification application using MFCC feature extraction and Dynamic Time Warping for enrollment and recognition. GitHub Repo

• Implemented an end-to-end speaker recognition pipeline: audio capture → preprocessing (framing/windowing) → MFCC feature extraction → enrollment database → DTW-based matching for verification; built a WinForms UI for enrollment, testing, and live recognition.

**Asteroids.** Python game project implementing the classic "Asteroids" arcade experience.

GitHub Repo

• Built a playable arcade-style game demonstrating core game-dev concepts: game loop, input handling, object spawning, collision handling, scoring, and asset management; includes runnable code and project assets.

#### **EXTRA-CURRICULAR ACTIVITIES**

• Trainee at acmASCIS student activity in which I completed levels 1 and 2 in problem-solving using C++, Topics (Optimization, Complexity Analysis, Number theory, Data structures, and Algorithms).