

# MOHAMED AL-HAJJI

## Software Engineer

### EDUCATION

#### BAHCESEHIR UNIVERSITY ISTANBUL, TURKEY

BSc in Computer Engineering  
2022 - 2026

### SKILLS

- C++
- Python
- Java
- SQL / PL-SQL
- Git
- Arduino

### RELEVANT COURSEWORK

- Object-Oriented Programming
- Data Structures & Algorithms
- Operating Systems
- Database Management Systems
- Computer Networks
- Embedded Systems Programming
- Artificial Intelligence

### LANGUAGES

- Arabic
- English

### LINKS

[Portfolio](#)  
[GitHub](#)  
[LinkedIn](#)

### ABOUT ME

I'm a computer engineering graduate with experience in software development through academic and personal projects. Skilled in programming, problem solving, and building practical systems using technologies such as C++, Python, and SQL. I'm always looking to expand my knowledge and contribute through practical and meaningful work.

### EXPERIENCE

#### Home Security System

*ESP32 • IoT • C++ • Sensors • Wi-Fi*

- Worked on the software side of an IoT-based home security system using ESP32, sensors, and Wi-Fi communication.
- Implemented system logic for intrusion, fire, and gas detection with real-time alerts and automated responses.
- Contributed to event logging, sensor processing, and communication between system components.

#### Mini LMS - Microservices Backend

*Spring Boot • PostgreSQL • Docker • JWT*

- Created a microservices-based LMS backend using Spring Boot, PostgreSQL, JWT authentication, and Docker.
- Worked on authentication, course, and enrollment services with communication between services.

#### Encrypted P2P Chat Application

*Python • TCP/UDP • DES Encryption*

- Created a peer-to-peer chat application with encrypted messaging using Diffie-Hellman key exchange and DES encryption.
- Implemented peer discovery, socket communication, and message logging using Python.
- Worked with TCP/UDP networking and encrypted message transmission.

#### ChatGPT Android Application

*Java • Android Studio • Retrofit • Gson*

- Developed an Android chatbot application using the OpenAI API for real-time conversations.
- Worked with Java, Retrofit, and JSON parsing for API communication.