

# Khalil Hassan

📍 Beirut, Lebanon    ✉ khalil.hassan@lau.edu    ☎ 78 936 982    🔗 Khalil Hassan    🌐 KhalilHassan

## EDUCATION

### Lebanese American University

BS in Computer Science

Beirut, Lebanon

Aug 2024 – Present

- **Coursework:** Data Structures and Algorithms, Web Programming, Database Systems, Software Engineering

## EXPERIENCE

### CyberSecurity Intern

Oct 2024 – Jul 2025

XpertBot

- Secured AWS infrastructure through SSH key-based authentication, VPN setup, IAM roles, and enforced MFA.
- Performed penetration testing on APIs and mobile apps using Burp Suite and OWASP ZAP.
- Enabled encryption for data at rest and in transit; set up centralized logging and monitoring via AWS CloudWatch.

### The Complete Web Development Bootcamp

Online

Dr. Angela Yu – Online Course

- Completed a full-stack course covering React, Node.js, PostgreSQL, and Web3; built end-to-end web applications.

## PROJECTS

### Velo – Visual App Builder | Flutter, Dart, Node.js, Supabase, PostgreSQL

Spring 2026

- Collaborated in a team of 5 to design a no-code cross-platform app builder with full SRS documentation, layered client-server architecture, and UML models across 10 subsystems including real-time collaboration and an AI assistant.
- Contributed to implementing a Flutter-based visual editor with a JSON-to-widget-tree engine and an AI assistant supporting screen generation via LLM APIs.

### Full-Stack Web Application | React, Tailwind CSS, Node.js, Express.js, MySQL

Spring 2026

- Built a responsive React frontend with 8+ pages (auth, dashboards, CRUD views) using React Router and Tailwind CSS, deployed on GitHub Pages.
- Developed a Node.js/Express RESTful API with MySQL, JWT authentication, bcrypt password hashing, and protected routes.

### Python Game: Fruit Ninja Clone | Python, Pygame, TensorFlow, Keras, NumPy

April 2025

- Built a Fruit Ninja recreation using Pygame and PGZero, implementing fruit slicing mechanics, bomb avoidance, and level progression.
- Added an AI-driven difficulty mode using a lightweight neural network to adapt gameplay based on real-time player performance.

### Online Learning System Database | MySQL

Dec 2025

- Designed and implemented a relational database for an online learning platform using ER modeling, enforcing constraints and relationships.
- Wrote complex SQL queries using joins, subqueries, aggregation, triggers, and views to support platform functionality.

## EXTRA-CURRICULAR ACTIVITIES

### Participant – Cybersecurity CTF

March 2025

- Competed in Lebanon's largest CTF tournament, tackling challenges in cryptography, application security, and network security.

### Coding Camp Participant | Murex

April 2025

- Participated in a C++ problem-solving camp led by senior Murex developers.

### Club President | LAU

Spring 2026

- Led club activities, coordinated members, and represented the club at university events.

## TECHNOLOGIES

**Languages:** Java, Python, C++, HTML, CSS, JavaScript, SQL

**Frameworks & Libraries:** React, Node.js, Express.js, Tailwind CSS, TensorFlow, Keras

**Databases:** MySQL, PostgreSQL

**Developer Tools:** Git, GitHub, VS Code, Burp Suite, OWASP ZAP, AWS CloudWatch