

# Myriam Hamam E. Abdelmalek

Software Engineering | Full-Stack & Mobile Developer

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🌐 Portfolio Website

🌐 [linkedin.com/in/myriam-hamam](https://www.linkedin.com/in/myriam-hamam)



## 📁 EXPERIENCE & EDUCATION

### Teaching Assistant (TA)

2025 – Present

#### Misr International University (MIU)

- Assist in conducting undergraduate Mathematics tutorial sessions, focusing on logical derivations.
- Break down complex mathematical problems into clear, structured, and manageable steps for students.

### B.Sc. in Computer Science (Software Engineering)

Expected 2027

#### Misr International University (MIU)

## </> TECHNICAL SKILLS

### MOBILE & AI DEVELOPMENT

Kotlin, Java, Android Studio, Android SDK, XML, Python, OpenCV, MediaPipe

### ARCHITECTURE & DESIGN

OOP, SOLID Principles, MVC Architecture, Design Patterns, UML, ERD, DFD, Use Case Modeling

### BACKEND & WEB DEVELOPMENT

React.js, Node.js, Express.js, Flask (REST APIs), Django, Firebase, SQL, MongoDB, JSON

### DEVOPS, TOOLS & DATA

Git, GitHub, Agile, Scrum, SDLC, CI/CD Fundamentals, Postman, Power BI, ETL, SQL Server

## 🔧 TECHNICAL PROJECTS

### Blink-to-Click – Accessibility HCI System

Python, Kotlin, OpenCV

- Developed a hands-free interaction system using real-time eye-blink detection via MediaPipe and OpenCV.
- Integrated a Flask REST API to connect AI processing modules with Android and web interfaces.

### TripLink / CampusEats – Full-Stack Applications

React.js, Node.js, Firebase

- Built scalable applications with secure authentication and real-time database integration using MVC principles.

### Recruitment Management System

Java, OOP, Design Patterns

- Designed a modular system with candidate filtering, secure login, and file-based data persistence.

### PintOS Kernel Optimization

C Programming

- Enhanced thread scheduling and redesigned alarm clock synchronization to eliminate busy-waiting in the OS kernel.

### Enterprise Network Architecture

Cisco Packet Tracer

- Designed a secure network with VLAN segmentation, multi-area OSPF routing, VPN tunnels, and NAT.

### Personal Portfolio Website

HTML5, CSS3, JavaScript

- Developed a fully responsive website with optimized UI and cross-device compatibility.