

# Mayssan Al-Ashkar



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## Summary

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Dedicated and detail-oriented Computer Engineer with over two years of experience in web, mobile, and AI-driven application development Graduate of SE Factory's intensive Full Stack Web Development (FSE) and Foundations of Computer Science (FCS) bootcamps, which provided hands-on training in modern programming languages, software development methodologies, and real-world project collaboration. Proven ability to develop and manage software projects, ensuring that they meet user needs and technical specifications. Experienced in working with interdisciplinary teams to deliver innovative and high-quality software solutions.

## Technical Skills

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- **Artificial Intelligence & Automation:** Machine Learning ( TensorFlow), Natural Language Processing (NLTK, Transformers), AI Agents, Automation Workflows (n8n), Prompt Engineering, Model Deployment (FastAPI, Flask, Docker, Firebase Functions).
- **Data Science & Analytics:** Python (Pandas, NumPy), Data Cleaning, Feature Engineering, SQL (advanced), Big Data basics (MongoDB, Firebase, MySQL).
- **Back-end Development:** PHP (advanced), Laravel (advanced), Node.js (intermediate), TypeScript (intermediate), RESTful APIs, Microservices, Authentication & Authorization.
- **Front-end Development:** JavaScript (advanced), React (advanced), Flutter & Dart (advanced), HTML/CSS (advanced), Responsive UI/UX Design.
- **DevOps & Tools:** Git & GitHub (advanced), CI/CD, Docker, Linux, Cloud Deployment (Firebase Hosting, AWS basics), API Integration, Version Control, Postman.
- **Core Competencies:** Analytical Problem-Solving, Data Structures & Algorithms, Complexity Analysis, Design Patterns, Object-Oriented Programming, Team Collaboration, Research and Experimentation in AI Systems.
- **Languages:** Arabic (native), English (advanced), French (intermediate).

## Education

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- **Lebanese International University, Tripoli** *Oct 2021 – June 2025*  
BS in Computer Engineering.
- **42school, Beirut** *Feb 2025*  
C++ Programming Language.
- **SE Factory, Beirut** *Feb 2025 – May 2025*  
Foundations Of Computer Science Course (FCS).
- **SE Factory, Beirut** *June 2025 – sep 2025*  
Full-Stack Software Engineering Bootcamp (FSE),

## Freelance Project

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- **Web Developer / AI Agent Developer** *Jan 2024 – Feb 2024*  
**Code Alpha, Remotely**
- Designed and developed responsive web applications using modern frontend technologies.
- Built and integrated AI agents for task automation, user interaction, and intelligent responses.
- Performed coding, debugging, testing, and deployment of web and AI-based features.
- Successfully delivered 3+ responsive web applications with AI-powered functionalities.

## Certificates

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- **FreeCodeCamp** *July 2024*  
Responsive Web Design.
- **AWS re/Start Graduate** *Jan 2023*  
Amazon Web Services.
- **FreeCodeCamp** *June 2024*  
Scientific Computing With Python.
- **HackerRank** *May 2024*  
SQL

## Projects

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- HearYou – AI-Powered Smart Safety System** *May 2025*
  - Developed a real-time assistive system for deaf and hard-of-hearing mothers using AI audio recognition, IoT sensors, and mobile alerts.
  - Trained and deployed a lightweight sound classification model (baby cry, door knock, phone ring) using TensorFlow and a Python Flask microservice.
  - Implemented an on-device AI Agent for adaptive learning based on user feedback and environment patterns.
  - Automated alerts, summaries, and AI workflows using **n8n**, integrated with Firebase and mobile push notifications.
  - Tools Used: Flutter, Python, TensorFlow, Firebase, MongoDB, C++, n8n, AI Agent (LangChain, OpenAI API).
- Time Capsule – AI-Enhanced Personal and Social Platform** *Jun 2025*
  - Built an AI-driven platform for creating and revealing future messages with private, public, and unlisted visibility options.
  - Integrated an AI Agent for semantic analysis, emotion tagging, and intelligent time-based recommendations.
  - Implemented AI-powered text summarization for public capsule previews.
  - Automated email scheduling and content moderation using **n8n** connected to Laravel APIs.
  - Tools Used: React, Laravel, MySQL, Redis, n8n Automation, AI Agent (OpenAI API).
- Car Damage Detection & Cost Estimation System** *Oct 2025*
  - Developed an AI-powered system to detect vehicle damage from images and estimate repair costs automatically.
  - Trained machine learning models for damage classification and severity assessment.
  - Integrated an AI Agent to generate cost estimates and explain predictions in natural language.
  - Built a full-stack web platform for image upload, analysis, and reporting.
  - Tools Used: Machine Learning, React, Laravel, AI Agent.
- Graph-Based Retrieval-Augmented Generation (RAG) System** *Nov 2025*
  - Designed a graph-based RAG system to model and query complex relationships across projects, departments, KPIs, and development objectives.
  - Implemented multi-layer graph representations to handle non-linear and overlapping relationships.
  - Integrated an AI Agent for intelligent querying, reasoning, and context-aware responses.
  - Applied the system to consulting use cases requiring structured knowledge discovery and decision support.
  - Tools Used: Graph-Based RAG, AI Agent, Knowledge Graphs, Retrieval-Augmented Generation.