

# Khalil Dabbah

## Information Systems Student

khalildabbah@gmail.com | 050-285-2944

<https://www.linkedin.com/in/khalildabbah/> | <https://github.com/khalildabbah> | [My Website](#)

---

### SUMMARY

Computer Information Systems student specializing in software development using modern technology stacks and real-world engineering practices, focused on contributing to real-world systems and teams.

Applied algorithms, data structures, and system design principles across real projects, translating academic concepts into production-ready solutions.

Hands-on experience building production-ready projects across full-stack, AI, and data-driven systems, prepared to contribute skills and knowledge toward real-world technology solutions.

---

### PROJECTS & PRACTICAL EXPERIENCE

**AI Newsletter SaaS Platform** – Next.js, TypeScript, MongoDB, Clerk, OpenAI.

(October 2025)

Production-ready AI SaaS automating newsletter creation from RSS feeds with AI-generated content.

Built as a scalable full-stack system for real users with subscriptions and performance optimization.

- Multi-provider authentication and subscription billing using Clerk
- Streaming AI newsletter generation for fast, interactive content
- Shared RSS pipeline with deduplication and caching (~40% storage reduction)

**Local OCR Data Extractor for Accounting Firms** – Tesseract.js, Google Vision, Ollama, Firebase

(December 2025)

(Privacy-first system for extracting structured financial data from invoices using local OCR and AI processing.)

Designed to protect sensitive client information by avoiding external LLM data sharing

- Privacy-first OCR pipeline using Tesseract.js (local OCR), Google Vision API, and Ollama (local LLM)
- Structured invoice data extraction (VAT, totals, dates, company IDs) using AI-based parsing
- Serverless backend with Firebase Functions, Firestore, and Storage

**Movie Recommendation Engine** - Python, Pandas, Scikit-learn, TF-IDF

(June 2025)

Content-based recommendation system built on textual features using TF-IDF and similarity scoring.

Designed to handle large-scale datasets with reproducible ML workflows and evaluation.

- TF-IDF-based recommendation system with cosine similarity, delivering ~85% accuracy
  - End-to-end ML data pipeline on a 1.2M+ movie dataset using Python, Pandas, and Scikit-learn
- 

### EDUCATION

B.Sc. in Computer Information Systems | University of Haifa

(October 2023 - present)

Relevant Coursework: OOP (92), Data Structures (89), Algorithms (89), Operating Systems, HCI

DB Management (91), Computer Networks, Web Application Developing (92).

---

### PROGRAMMING LANGUAGES AND FRAMEWORKS

Proficient with: Java, Python, C, SQL

Familiar with: JavaScript, TypeScript, Next.js, PHP, HTML, CSS.

Tools: Cursor, GitHub, IntelliJ, MySQL, MongoDB, React, REST APIs

---

### SOCIAL ACTIVITIES

- **2024-2025 Hasoub Pairs mentee**: gained mentorship from experienced software engineers on interviews prep, job search, and career growth through the program, which included tech company visits and community events.
- Attended major tech events, company tours, and hands-on workshops hosted by leading tech firms, gaining real-world insight into innovation, teamwork, and emerging technologies.

### LANGUAGES:

• Arabic - Native      • Hebrew - Highly Proficient      • English - Highly Proficient