● OPEN TO FULL-TIME ROLES · KANSAS CITY OR REMOTE

Mohamad Abboud

FULL-STACK SOFTWARE ENGINEER

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Five years of end-to-end ownership of client-facing applications, from requirements and architecture through deployment, infrastructure and ongoing support. C#/.NET, Python and PHP, across secure financial transaction platforms and a portfolio of commercial web products, as the sole technical owner and the primary client contact. Since 2026, designing, training and evaluating my own machine-learning systems end to end, without hosted AI APIs.

5	400+	6	80%
YEARS END-TO-END OWNERSHIP	BANKING INSTITUTIONS SERVED	CLIENT APPLICATIONS OWNED	PROCESSING TIME REMOVED

01 EXPERIENCE

Independent Projects — SOFTWARE ENGINEER

Jan 2026 - Present · Kansas City, MO

- Designed, trained and evaluated my own machine-learning models end to end in PyTorch, with no hosted AI APIs: a **two-stage classifier** (a DistilRoBERTa detector, then a DistilBERT typer across 13 fallacy types) that flags passages which may lean on a logical fallacy, with a confidence score rather than a verdict (**Fallacy Detector**).
- Built a document-intake pipeline that turns messy invoices into validated PostgreSQL records, with a review queue for the documents it is unsure about. Its own evaluation reports **98.3% field accuracy** against a 75.1% baseline, covered by **355 tests** (**Mailman**).
- Built portable memory for AI chat: a long conversation becomes a compact brief where every line traces back to the messages it came from, benchmarked against a plain summary at the same token budget on a **261-fact answer key** written by hand (**Herder**).
- Wrote a WebGL2 renderer from scratch, with no engine, for a voxel diorama a camera walks through on a timeline, for recording video, covered by **620 tests** (**Trail**).
- Run this site end to end: requirements written before the code, an allowlist build published by **GitHub Actions** on every push, and **Docker Compose with Caddy** for the services that run on a server, on my own domain.

Tekkii — FULL STACK WEB DEVELOPER

Jan 2023 - Jan 2026 · Kansas City, KS

- Owned a portfolio of **six client web applications** across logistics, e-commerce, public sector and retail as the sole technical lead, driving each engagement from requirements and client communication through architecture, development, deployment and ongoing support in an Agile/Scrum process.
- Architected and built an automated **EDI capture and transmission system** from the ground up for Kansas City Drayage, replacing an entirely manual data-entry workflow, cutting processing time by **roughly 80%** and contributing to a **50% increase in profit**.
- Set the backend direction across the client portfolio, designing RESTful APIs, service layers and optimized SQL databases (PostgreSQL, SQL Server, MySQL) in Python and PHP, and integrating third-party services including PayPal, SendGrid and OneSignal.
- Inherited and stabilized applications built by previous developers, clearing long-standing defects and advising application owners on architecture, technical debt and feature direction.
- Led the rebuild of an e-commerce platform's backend and database layer, driving growth in traffic and revenue that supported the product's **successful acquisition**.
- Delivered an interactive, hardware-integrated installation at the **College Basketball Experience**, personally integrating a custom application with cameras, displays and a teleprompter.

Allied Engineering Group — SOFTWARE ENGINEER

Jun 2019 - Jun 2021 · Beirut, Lebanon

- Built and maintained **SWIFT financial transaction platforms** in C#/ASP.NET on SQL Server, processing **thousands of secure transactions daily** for over **400 banking institutions** worldwide, including QNB.

- Owned the data layer for mission-critical, high-throughput transaction systems, designing schemas and stored procedures and optimizing complex queries to improve application performance and reliability.
- Served as the direct technical liaison to banking clients, gathering requirements and delivering customized interfaces and features that measurably increased usability and client satisfaction.
- Diagnosed and resolved production issues by monitoring SQL and application logs, maintaining uninterrupted operations for banking clients and surfacing risks and blockers ahead of release.

02 CAPABILITIES

01 LANGUAGES	PHP, Python, JavaScript, C#, SQL
02 WEB DEVELOPMENT	Public-Facing Web Applications, REST APIs, HTML / CSS, Vue.js, React, Angular, Node.js, Responsive Design
03 DATABASES	PostgreSQL, SQL Server, MySQL, Query Optimization, Stored Procedures, Schema Design, Data Modeling, Large Dataset Processing
04 ARCHITECTURE & DELIVERY	System Design, API Design, Legacy System Modernization, Web Application Security, Authentication, Git / GitHub, Docker, CI/CD Pipelines, Server Administration (SSH/FTP), Agile / Scrum, Requirements Gathering, Stakeholder Communication
05 MACHINE LEARNING	PyTorch, Fine-Tuning Transformers, Deep Learning, Model Evaluation, Local Models, No Hosted APIs, Vector Search

03 PROJECTS

WEBGL2 · NO ENGINE

Trail

A voxel diorama a camera walks through on a timeline, for recording video. Hand-written WebGL2, no engine, 620 tests.

WEBGL2 · WEB AUDIO · NO ENGINE

Pedalsim

Drive a V4, V6, V8, V10 or V12 by its gauges alone. Each engine is built from its real bore and stroke, the gauges draw themselves where the engine has been, and its sound is made from its own firing pulses. 159 tests.

FASTAPI · PGVECTOR · LOCAL MODELS

Herder

IN PROGRESS: A BROWSER PROTOTYPE RUNS HERE; THE FULL SYSTEM IS STILL IN TESTING

Portable memory for AI chat: a long conversation becomes a compact brief where every line traces back to the messages it came from. Benchmarked against a plain summary at the same token budget, on a 261-fact answer key written by hand.

PYTHON · DEEP LEARNING

Pneumonia Detection

Deep-learning application classifying chest X-rays for signs of pneumonia. Free hosting, so the first load takes about a minute to wake.

FASTAPI · POSTGRESQL · DOCKER

Mailman

Document intake: messy invoices in, validated records out, with a review queue for the ones it is unsure about. Its own evaluation reports 98.3% field accuracy against a 75.1% baseline; 355 tests.

PYTHON · PYTORCH · FLASK

Fallacy Detector

Flags passages that may lean on a logical fallacy, as a warning with a confidence, never a verdict. A DistilRoBERTa detector and a DistilBERT typer across 13 fallacy types, trained for the job; no hosted model, no API key.

PYTHON · JAVASCRIPT · COLAB

Code vs Code

IN PROGRESS: HELPER-MODEL TRIALS ON COLAB; NOT PLAYABLE YET

A coding duel where an AI helper the player names writes the code. The player wins by asking the client the right questions, catching the helper's mistakes and finding the bugs in the opponent's app, judged by a quality checklist.

PYTHON · LLM TOOLING

Evaluaters

Two AI-engineering pieces: a harness that scores structured extraction case by case, and typed GitHub tools for a triage agent.

04 EDUCATION

UNIVERSITY OF MISSOURI-KANSAS CITY

Master of Science, Computer Science

2021 - 2023

Pneumonia Detection App: A deep learning application for medical image analysis in Python, classifying chest X-rays for signs of pneumonia.