

Insaf Hashem

Lebanon • +961 81 205 542 • hasheminsafo@gmail.com • linkedin.com/in/insaf-hashem • <https://github.com/Juussticee>

AI Engineer • Generative AI, Machine Learning, Applied Systems • building the intelligent future, today.

AI Engineer specializing in Generative AI, Machine Learning, and Automations, with hands-on experience designing, building, and deploying end-to-end AI, automation and software systems. Proven ability to develop and integrate deep learning and classical ML models into production pipelines, including LLM-based systems, NLP solutions, AI agents, and RAG architectures. Experienced in building data-driven pipelines, optimizing performance, and delivering scalable AI solutions through cross-functional collaboration and applied problem solving.

EDUCATION

Bachelors in Computer Science

Jinan University JU • Lebanon • GPA: 3.3 • 11/2022 – 07/2025

EXPERIENCE

NuWatt • Remote • 12/2025 – Present

AI Engineer • Freelancer

- Integrated LLM-based recommendation components into production software using Python and enhanced the integrated chatbot algorithm.
- I carried out various tasks such as EDA, data cleaning, preprocessing, and feature engineering to develop a forecasting model, which led to an improvement in forecasting robustness in the system and a reduction in prediction error by ~40%.
- Optimized embedding-based personalization, trained and deployed models, added database monitoring scripts for null detection, and resolved threading issues to improve system performance.
- Created web-based/android automations to carry out tasks such as testing apps, and web scraping for articles and discussions.

Tawasoul • Remote • 02/2026 – 04/2026

AI Engineer • Freelancer

- Integrated a **real-time AI avatar interview system** using LiveKit and LiveAvatar, implementing session lifecycle orchestration, participant management, and reliable connection handling.
- Built **voice-based conversational flows**, handling commands, speech events, transcription, and backend AI responses for avatar speech delivery.
- Diagnosed and resolved **media and streaming issues**, improving reliability through telemetry, defensive state management, and optimized audio-video handling.

CERTIFICATIONS

AI Workflow Specialization • 06/2025 – 09/2025

IBM

Machine Learning Specialization(AIC) • 09/2024 – 04/2025

Zaka.ai

PROJECTS

Advanced Customer Support System • 11/2025 – Present

- Designed automated customer support workflows in n8n for Gmail message processing and thread organization.
- Integrated AI models to extract sender info, classify emails, and determine intent, reply to the users, and escalate to humans when needed. saving the customers conversation history in postgres

Customer Segmentation & RFM Analysis • 06/2025 – 09/2025

- **Collaborated in a team of 2** to perform **Customer Segmentation** on **>600k retail transactions** using **RFM (Recency, Frequency, Monetary) analysis**.
- Delivered **actionable insights** for **targeted marketing strategies, increase engagement potential by ~12%** in simulations.

Food Habit Tracking App • 04/2025 – 06/2025

Jinan University

- **Developed a Conditional Variational Autoencoder (CVAE)** for **recipe generation** using **nutrition data** and **50k+ user inputs**.
- Implemented Custom and Pre-set **Embedding Techniques** and **Dynamic Masking** , trained on a **cleaned nutrition dataset** to improve model **adaptivity**.
- **Extracted and cleaned structured data** from **50k+ unstructured recipe entries** using RAG+LLMS.

SKILLS

AI & GenAI Expertise: AI Agents, Anomaly Detection, LLMs, pandas, scipy, matplotlib, pytorch, Prompt Engineering, Regularization, Scikit-Learn, Statistical Modeling, Tokenization, Vectorization

Cloud Platforms & Deployment: AWS, Docker, GCP, REST APIs & ML Ops basics

Business & Communication: Actionable Insights, Analytical Problem-Solving, Cross-Functional Collaboration, Data-Driven Decision Making, Requirements Gathering

AI Workflow and Automation: AI agent orchestration, automation debugging, automation pipelines, Custom GPT integration, n8n, Retrieval-Augmented Generation (RAG), workflow design, Zapier

Backend Development & Databases: API integration, authentication, Cursor, edge functions, JSON handling, Lovable, MERN Stack, Node.js, PostgreSQL, Python, real-time database updates, REST APIs, storage, Supabase (database schemas, vector search), Webhooks