

YOUSEF HAMDAN

AI Engineer · Machine Learning Engineer · Data Scientist

Greater Toronto Area, ON | hamdanyousef9@gmail.com

<https://yousefhamdan.dev> | [linkedin.com/in/yousef-hamdan-b905b81b8](https://www.linkedin.com/in/yousef-hamdan-b905b81b8) | github.com/yousefhamdan

SUMMARY

AI and Data Scientist with 3+ years across the full lifecycle, data pipelines at petabyte scale, model development, and cloud deployment on Azure and AWS. Experience spans large language models, retrieval systems, and classical ML for finance and government clients. AWS Certified Machine Learning Engineer and Microsoft Azure AI Engineer, completing an MSc in Computer Science at Lakehead University.

TECHNICAL SKILLS

Languages: Python, SQL, Linux Shell

AI & ML: NLP, LLMs, RAG, deep learning, computer vision, OCR/ASR, LangChain, Milvus, time series forecasting

Cloud & Tools: Microsoft Azure (Azure ML, Azure AI Services), AWS (SageMaker), Git, Docker, Streamlit, Dash, Power BI

Data: Large-scale web scraping, data cleaning and preprocessing, ETL pipelines, vector databases, dashboarding

EXPERIENCE

Data Scientist

Jul 2023 – Aug 2025

Alfaisal for Electronic Content

Amman, Jordan

- Built scalable scraping, preprocessing, and Azure OCR/ASR pipelines that produced 1T+ Arabic and 10T+ English training tokens for Jais, a leading multilingual LLM, in collaboration with G42.
- Designed cleaning and deduplication workflows that raised corpus quality across noisy multilingual web and document sources.
- Delivered multilingual chatbots and economic dashboards for UAE government clients using LangChain, Milvus, Streamlit, and Dash.

AI Engineer

Oct 2022 – Dec 2022

Digital Arena Solutions

Amman, Jordan

- Built ML models for income prediction, customer churn, risk scoring, and time series forecasting.
- Deployed and monitored models in production using Azure ML Studio.

NLP and Data Scientist (Internship)

May 2022 – Aug 2022

Qistas for Information Technology

Amman, Jordan

- Performed Arabic NLP preprocessing, clustering, and vectorization on unstructured legal text.
- Cleaned and structured large text corpora to support search and analysis.

PROJECTS

RAG Research Portal | *FastAPI, LangChain, LangGraph, Milvus, MongoDB* Retrieval-augmented question answering service: ingestion, chunking, embedding, vector search, and an agentic answering flow behind a REST API.

Criminal Detection — Siamese Network | *PyTorch, deep learning* Face verification trained on paired similarity rather than per-class labels, allowing new identities to be matched from very few reference images.

Real-Time ASL Recognition | *MediaPipe, OpenCV, neural networks* Live sign language recognition from webcam input, using extracted hand landmarks as compact features for low-latency classification.

Rubik's Cube Solver | *Python, OpenCV* Reads cube state from webcam input via colour segmentation, then solves it using a search algorithm implemented from scratch.

EDUCATION

Master of Science in Computer Science

Sep 2025 – Sep 2026

Lakehead University

Thunder Bay, ON, Canada

Bachelor of Science in Data Science and Artificial Intelligence

Sep 2019 – Jun 2023

Princess Sumaya University for Technology

Amman, Jordan

CERTIFICATIONS

AWS Certified Machine Learning Engineer – Associate (2026) · Microsoft Certified: Azure AI Engineer Associate, AI-102 (2026) · Microsoft Certified: Azure AI Fundamentals, AI-900 (2022) · IBM Data Analyst Professional Certificate (2024) · Neural Networks and Deep Learning, DeepLearning.AI (2025)