Ali Zayat

+961 81636494 | alihaidarzayat@gmail.com | linkedin.com/in/ali-zayat | github.com/tacoshrimp |

Byblos, Lebanon | Remote any time zone | Open to relocation

PROFESSIONAL SUMMARY

AI Engineer and Computer Engineer with 3+ years of experience shipping practical systems across LLMs, RAG, computer vision, QA automation, full-stack development, and Azure cloud. Built production-facing AI and data infrastructure across insurance, logistics, and sports analytics, including regulated Azure migration, semantic retrieval, automated testing, performance benchmarks, and ML deployment. Second author on a peer-reviewed LLM-agent paper published in IEEE Xplore from AICCONF 2026, with current cybersecurity growth through HTB Academy CPTS preparation.

CORE COMPETENCIES

Applied AI Engineering | LLM Agents and RAG | Computer Vision and ML | QA Automation | Azure Cloud Migration | Full-Stack Development | MLOps and Deployment | AI Security Foundations

WORK EXPERIENCE

OneRail

Jun 2023 - Jun 2026

QA & Automation Engineer

- Reduced regression testing cycle time by 40% by building a Selenium-based automated test suite covering 30 critical user flows.
- Designed an automated stress-testing pipeline with JMeter and k6, enabling repeatable performance benchmarks that surfaced 12 critical bottlenecks before production deployments.
- Accelerated defect resolution by 20% by standardizing bug-reporting workflows between engineering, QA, and product while supporting Agile release cycles.

UAE-Based InsureTech Firm (NDA)

Apr 2026 - Jun 2026

Full-Stack Engineer & Cloud Migration Consultant | Contract

- Achieved CBUAE data-residency compliance for 3000+ insurance cases by leading a migration from Supabase storage to Azure Blob Storage, Azure SQL, and Azure Functions.
- Made document retrieval latency 20x faster by implementing vector database indexing and RAG-ready semantic embeddings on case metadata across 3000+ insurance records.
- Hardened document security for 1000+ users, achieving zero access-policy violations, by enforcing private storage paths, signed URLs, file-type and size validation, and audit logging.

inmind.ai

Sep 2024 - Jun 2025

AI Engineer | Part-time

- Improved computer vision model accuracy by 30% by fine-tuning PyTorch-based architectures with Hugging Face Transformers and NVIDIA toolchains on custom-curated datasets.
- Reduced model deployment turnaround from 3 to 2 days by containerizing inference pipelines with Docker and standardizing MLOps workflows across training, evaluation, and serving.

Fitchain

Jan 2023 - Oct 2023

Computer Vision Engineer | Part-time

- Boosted basketball action-detection model precision by 40% by retraining PyTorch models on 7 hours of domain-annotated game footage.
- Rebuilt a two-year-old computer vision pipeline, reducing end-to-end runtime by 35% by eliminating 3 preprocessing stages and re-architecting the inference graph.
- Delivered 6 new detection features ahead of schedule by leading a team of 3 engineers and resolving cross-layer architecture blockers across ML and data pipeline tracks.

InMind, BSynchro, Anchor Ventures Holding

Sep 2022 - Sep 2023

Earlier AI, Robotics, and Front-End Roles

- Created AI, robotics, and front-end projects spanning C++, CMake, ROS2, SORDI object detection, NLP review classification, insurance classification models, real-world data preparation, and React websites.

SELECTED RESEARCH AND PROJECTS

Stateful LLM Agents for Autonomous Capture-the-Flag Solving

Research

Published in IEEE Xplore from AICCONF 2026. Designed a multi-agent LangChain pipeline with safety guardrails enabling LLMs to autonomously solve CTF challenges; introduced a universal evaluation benchmark for cross-system performance comparison.

LangChain, LLM agents, CTF evaluation, safety guardrails

Generating Music with AI: A Stable Diffusion Approach

Manuscript

Developed a novel MIDI-generation method combining Stable Diffusion models with MIDI datasets and benchmarked the approach against existing generative AI methods.

Stable Diffusion, generative AI, MIDI datasets

Car Security System

Award

Created an AI-powered security system that detects and tracks cars using object detection. Won the AI section of the Lebanese American University Engineering Student Design Competition in 2023 with a team of two.

Computer vision, object detection

Dormbase Mobile App and Company Listing Website

Built student housing and company listing applications with CRUD functionality, login access privileges, and database-backed workflows.

Flutter, PHP, MySQL, HTML, CSS

EDUCATION

Bachelor of Engineering, Computer Engineering Lebanese American University — Sep 2020 - Jul 2025

Byblos, Lebanon

Minor, Business Studies Lebanese American University — Jan 2024 - May 2025

Byblos, Lebanon

CERTIFICATES AND AWARDS

InMind Academy Certificate	InMind Academy	2023
Engineering Student Design Competition Winner, AI Section	Lebanese American University	2023
Global Mentorship Initiative Certificate	Global Mentorship Initiative	2025
HTB Academy CPTS Preparation	Hack The Box Academy	In progress

SKILLS

AI and Data: PyTorch, Hugging Face Transformers, LangChain, Computer Vision, LLMs, Machine Learning, Diffusion Models, Neural Networks, RAG, Fine-tuning, Prompt Engineering, FastAPI, LangSmith, RAGAS, OpenAI API, Anthropic API, MLflow, YOLOv7, OpenCV, scikit-learn, NLP

Cybersecurity: LLM agents for CTF solving, CTF evaluation, safety guardrails, HTB Academy CPTS preparation, pentesting fundamentals in progress

Software Engineering: JavaScript, React, TypeScript, Java, PHP, HTML/CSS, Dart, Flutter, MySQL, Firebase, API integration, CRUD applications

QA and Automation: Selenium, API testing, JMeter, k6, regression testing, performance testing, bug reporting, Agile, Scrum

MLOps and Deployment: Docker, Kubernetes, Vector Databases, Azure Functions, Azure Blob Storage, Azure SQL, AWS, CI/CD

Robotics and Languages: C++, CMake, ROS2; Arabic native, English fluent, French intermediate