Ibrahim Alobaid

AI Engineer

Aleppo, Syria |Emails |linkedin

PROFILE SUMMARY

AI Engineer specializing in building real-time voice agents and multi-modal KYC automation, with deep expertise in low-latency STT/TTS pipelines, session-based dialogue orchestration, and LLM-assisted verification. Experienced in developing multi-agent systems for B2B sales to automate lead research and outreach workflows. Proficient in designing AML-focused ETL pipelines, including data ingestion, normalization, and risk-oriented enrichment to support compliance operations.

TECHNICAL SKILLS

- **Core AI & ML**: LLMs, RAG, Computer Vision (YOLO, OpenCV), NLP, Voice Agents (STT/TTS, VAD).
- **Voice Tech:** Pipecat, WebRTC, Session Orchestration, Real-time Latency Optimization.
- **Languages & Frameworks:** Python, SQL, FastAPI, LangChain, CrewAI, Crawl4AI.
- **Tools & Platforms**: Docker, MongoDB, Qdrant (Vector DB), Git,n8n, Render.

WORK EXPERIENCE

AI Engineer | *Amani AI* (Remote)

May 2025 – Present

Key Project: Real-Time Multilingual Voice KYC System

- **System Architecture**: Architected an end-to-end voice onboarding agent using **Pipecat** and **WebRTC** that supports concurrent sessions in Arabic, English, and Turkish with low-latency performance and VAD-powered turn-taking.
- **Orchestration & Logic:** Designed the system's stateful orchestration layer to manage complex dialogue flows, which reduced average handle time and minimized human hand-off through deterministic retry policies and fallback mechanisms.
- **Multi-Modal Verification:** Integrated the voice stream with LLM-assisted vision capabilities to verify IDs and selfies in real-time, implementing image-quality gating to ensure high-reliability evidence submission.

Other Engineering Initiatives:

- **B2B Multi-Agent Systems:** Developed autonomous agent workflows using CrewAI, LangChain, and n8n to automate lead research, personalization, and outreach for sales teams.
- **ETL & Compliance:** Engineered a distributed web scraping pipeline targeting 500+ data sources, ensuring high data availability for AML screening and risk-oriented enrichment.

AI Engineer Intern | H&H (Remote) GitHub URL

January 2025 – April 2025

- ***Scalable API Development:*** Developed and deployed a scalable AI chatbot API on Render, supporting multi-session interactions and automated scaling.
- ***System Architecture:*** Architected a modular **ChatbotController** and LLMProviderFactory to support multi-modal inputs (text, vision, SQL), enabling dynamic switching between OpenAI and Groq models to optimize for cost versus latency depending on query complexity.
- ***Optimization***: Applied the ReAct framework to improve context awareness and optimized session tracking for persistent state management.
-

PROJECTS

Autonomous Driving Systems (Graduation Project)

March 2024 – August 2024

- **Overview**: *Developed advanced visual perception techniques using image processing and Deep Learning, validated on the KITTI dataset and CARLA simulator.*
- **Object Detection:** *Trained state-of-the-art models (YOLOv3 to YOLOv10, Faster RCNN, SSD) achieving high precision in real-time tracking.*
- **Image Processing:** *Implemented edge detection, lane detection, and feature extraction (SIFT, ORB, HOG) to enhance recognition.*
- **3D Perception:** *Enhanced 3D object detection accuracy by 30% using stereo vision techniques and integrated LIDAR data for comprehensive environmental understanding.*

AI-Driven Document Processing & Retrieval System

October 2024

- **RAG Architecture:** *Developed a semantic search engine using Qdrant and RAG techniques to enhance LLM responses with contextual data.*
- **Backend Engineering:** *Designed a modular API using FastAPI and integrated MongoDB for structured metadata and optimized text chunking.*
- **Deployment:** *Containerized the entire application with Docker for scalable, production-ready deployment.*

EDUCATION

Master's Student in Artificial Intelligence Aleppo University

Sep 2025 – Present

Bachelor of Science in Information Technology Engineering Aleppo University

Sep 2019 – Sep 2024

VOLUNTEERING

Academic Content Creator | *Blue Bits Team*

March 2023 – Sep 2024

- Authored and proofread technical lectures and educational materials to support university colleagues in IT engineering subjects.

Languages

Arabic: Native

English: Professional Proficiency (Very Good)