

# Muhammad Ali Khan

+92-330-9863439 | [m.thekhan2003@gmail.com](mailto:m.thekhan2003@gmail.com) | [linkedin.com/in/muhammadalikhanaideveloper/](https://linkedin.com/in/muhammadalikhanaideveloper/) | [github.com/AKDURANI](https://github.com/AKDURANI)

## TECHNICAL SKILLS

**Languages:** Python, C/C++, Java, SQL, HTML/CSS, JavaScript

**Frameworks:** PyTorch, TensorFlow, Keras, Flask, Scikit-learn

**Libraries & Tools:** LangChain, LangGraph, Whisper, HuggingFace Transformers, TTS, SST, Prometheus, MLflow

**Developer Tools:** Git, GitHub, DVC, Docker, Google Cloud Platform, Cursor, Antigravity, Visual Studio

## EXPERIENCE

**Research Intern – Artificial Intelligence and Machine Learning Lab** June 2023 – August 2023

*FAST National University, Islamabad, Pakistan*

- Explored and fine-tuned open-source **Large Language Models** (LLMs) such as **LLaMA** for customer query.
- Applied **NLP** techniques like **cosine similarity** to enhance data retrieval and semantic matching.

**Agentic AI Intern - VulnautAI**

October 2025 – Present

*San Francisco*

*Remote, US*

- Orchestrated **LangGraph** agents via **Supervisor** patterns to automate smart contract auditing and evalutaion.
- Engineered an **AsyncIO Map-Reduce** pipeline to synthesize AST contexts and **RAG**-enhanced detection.

## FINAL YEAR PROJECT

**Palantir360** | *Python, Colmap, Flask, Gaussian Splatting, Unity, GitHub, Oculus Link* August 2024 – June 2025

- Developed a virtual reality experience that turns real estate walkthrough videos into **3D property tours**.
- Designed a smart **video-to-3D** pipeline that recreate stunningly lifelike environments.
- Seamlessly connected with the **VR headsets**, allowing potential buyers to explore every corner of a property.

## PROJECTS

**Agentic Smart Contract Auditor & Evaluator** | *LangGraph, RAG, LangSmith* October 2025 – Present

- Orchestrated **RAG**-enhanced adversarial audits via **LangGraph**, **Supervisor** pattern to detect vulnerabilities.
- Engineered a parallel **AsyncIO**, Map-Reduce pipeline to synthesize **AST** contexts for fault-tolerance.
- Built **evaluation** pipeline to benchmark agent consensus against ground truth accuracy via **LangSmith**

**Psychiatrist AI Agent** | *LangGraph, LangChain, Streamlit, LangSmith* October 2025 – November 2025

- Developed a agentic **psychiatrist** system to manage multi-turn therapeutic reasoning, utilizing **LangGraph**.
- Designed a **Streamlit** interface for **real-time** user engagement and personalized real-timetherapeutic suggestions.

**Agentic AI Travel Planner** | *Python, LangChain, LangGraph, LangSmith* October 2025 – November 2025

- Created an **agentic travel planning assistant** using **LangGraph** to coordinate agentic workflows for trip.
- Leveraged **LangSmith** to refine agent behaviors, monitor chain outputs, and end-to-end evaluation.
- Developed a **Streamlit dashboard** enabling seamless input of travel preferences, real-time suggestions.

**PDF-to-Audio TTS Microservice** | *Flask, Coqui TTS, Docker, Locust, Postman* March 2025 – April 2025

- Built a **Flask-based microservice** that extracts text from PDFs and generates audio via **Coqui XTTs**.
- Features: PDF upload, page range extraction, **Postman testing**, **Dockerization** and **gRPC-ready API**.

## EDUCATION

**FAST National University of Computer and Emerging Sciences**

Islamabad, Pakistan

*Bachelor of Computer Science, Major in Artificial Intelligence*

September 2021 – June 2025

**Cadet College Hasanabdal**

Hasanabdal, Punjab

*Intermediate in Pre-Engineering*

April 2016 – June 2021

## CERTIFICATIONS & ACHIEVEMENTS

- Foundation: Introduction to LangGraph – **LangChain Academy** (2025)
- Generative AI Advanced Fine-Tuning for LLMs – **IBM** (2025)
- AI Agents Using RAG and LangChain – **IBM** (2025)
- Deep Learning Specialization – **DeepLearning.AI** (2025)