

Muhammad Abdullah Wali

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EDUCATION

University of Engineering and Technology Taxila

Bachelor of Science in Software Engineering – Present

Taxila

Aug. 2023 – May 2027

EXPERIENCE

Machine Learning Engineer for Lumin Solutions

Lumin Solutions Rawalpindi

Oct. 2025 – Jan. 2026

Rawalpindi

- Worked as a Machine Learning Engineer for Lumin Solutions to help them create AI Video Dubber System

Artificial Intelligence Assistant

FAST University Islamabad

Aug. 2025 – Oct. 2025

Islamabad

- Explored methods and helped to create an Advanced AI Agent Game that will learn and get better over time for students in FAST University Islamabad

AI Engineer Intern

Zaytrics - NSTP

June 2026 – Aug 2026

Islamabad

- Helped in creation of a module of the famous **Review.it** AI tool

PROJECTS

DocuSync | Python, LangSmith, FastAPI, Qdrant, Ragas

July. 2024

- **Engineered** a context-aware multi-agent RAG system for a **client** achieving **97.06%** faithfulness and **100%** Context precision By orchestrating a **4-agent** retrieval pipeline with metadata filtering, cross-encoder reranking, Qdrant vector search, and Gemini 2.5 synthesis
- **Implemented** intelligent metadata tagging and asynchronous FastAPI services by combining LlamaIndex, Qdrant, LangSmith, and Ragas to deliver production-ready, environment-aware document retrieval with end-to-end observability

RAG System | Python, Qdrant, BAAI embeddings, HyDE routing

Feb. 2025

- **Built** enterprise knowledge-base RAG system achieving **95% retrieval accuracy** by integrating Qdrant, BAAI-embeddings, HyDE routing, and LongCat generation
- **Indexed 15+** IT knowledge articles into a semantic search pipeline by implementing intelligent chunking, vector-embeddings, and source-aware retrieval
- **Delivered** an LLM-powered IT support assistant that provided **100% retrieval-grounded responses** by restricting generation to retrieved context and citing source document.

Secure Coding AI System | Python, LangGraph, FastAPI, SQLite, OpenAI, Gemini, AST

- Developed an automated repository scanning engine combining **AST-based static analysis** with a **LangGraph AI orchestration pipeline** to flag security vulnerabilities and runtime bugs.
- Built an async backend using **FastAPI** and **AIOSQLite** that parses code zip archives and tracks background analysis states
- Implemented multi-provider AI model routing with strict token budgeting to deliver dynamic, expert-level redemiation steps

System Design Studio | Python, LangChain/LLMs, FastAPI, ReportLab (Graphics)

- **Engineered a distributed system research and publication pipeline** that translates architectural prompts into verified technical specifications, mathematically derived capacity models, and publication-ready PDF whitepapers using ReportLab

Plant Disease Classifier | Personal project

- Built an automated image classification pipeline in PyTorch to detect plant leaf diseases using the PlantVillage dataset. Leveraged transfer learning via a pre-trained ResNet-18 neural network, applying custom data transformations to maximize predictive accuracy.

Indie Software Projects | Python, Pyqt6

May. 2025

- Developed some Production Level School Management, Pharmacy and POS Systems currently having in **10+ Clients**.

TECHNICAL SKILLS

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

Frameworks: React, Node.js, Flask, LangChain, FastAPI, PyQt

Developer Tools: Google Cloud Platform, Azure, Docker, Linux, Postman, VS Code, Git, Github, Junit, IntelliJ

LLM & AI: RAG, AI Agents, LLM Integration, Prompt Engineering, LangSmith, MCP, MLOps

Libraries: PyTorch, TensorFlow, Scikit-learn, Pandas, NumPy, OpenCV, Matplotlib, Scipy

Professional Skills: Agile, Scrum, Project Management, Problem Solving

Certifications

IBM Data Science Specialization

Machine Learning Specialization – DeepLearning.ai

Deep Learning Specialization – DeepLearning.ai

Microsoft AI & ML Engineering

Prompt Engineering – Google

MLOps – Duke University

Project Management – Google

Cloud Engineering – Duke University