

# Muhammad Zayyan Ahmad

✉ zayyanahmad765@gmail.com [LinkedIn](https://www.linkedin.com/in/zayyan-ahmad)

🌐 [GitHub](https://github.com/ZayyanCPU) 🌐 [Website](https://zayyan.work)

## SUMMARY

Aspiring AI Engineer with hands-on experience in machine learning, specializing in Python-based data pipelines and preprocessing techniques. Currently a senior B.Sc. in Artificial Intelligence, skilled in AI automation and workflows, having expertise in MLOPs, fine tuning LLM models and developing efficient scripts for data gathering and cleaning. Proven ability to optimize machine learning models for real world applications, eager to leverage expertise to drive innovation in AI engineering.

## EDUCATION

**FAST - National University of Computer and Emerging Science**  
*Bachelor of Science, Artificial Intelligence*

**Aug 2022 – Jun 2026 (Anticipated)**

## EXPERIENCE

### Nexium

*AI Workflow Automation Intern*

**Jun 2025 - Aug 2025**

*Lahore, Pakistan*

- Integrated LLMs using LangChain with MongoDB and Supabase, and automated workflows via n8n while managing code in Git. This enabled web apps to handle requests automatically, improving responsiveness and reducing manual effort

## FEATURED PROJECTS

### Pak Journal Archive System

*Fast-NU (Final Year Project)*

- Preserves Pakistan's broadcast heritage through precise AI transcription and intelligent archiving and tagging technology. Advanced AI powered transcription system for Urdu news archives, converting video content into precise, searchable, and editable text.
- Supports high accuracy timestamped outputs with scalable storage and secure access for long term digital preservation.

### MultiSense Agent | <https://github.com/ZayyanCPU/MultiSense-Agent>

- Multimodal AI chatbot with WhatsApp integration capable of processing text, voice, images, and PDFs using RAG and n8n automation. Seamlessly interacts with users via WhatsApp API, supports multiple data formats, and is deployed with Docker for scalable, reliable performance.

### PromptDesk | <https://github.com/ZayyanCPU/PromptDesk>

- An AI powered customer support agent built with Python, LangChain, OpenAI GPT, a vector database, FastAPI, and React that answers user queries using semantic search over internal FAQs, documents, and past tickets, with source citations and human escalation for low confidence responses.

### IntelliSignal-RL | <https://github.com/ZayyanCPU/IntelliSignal-RL>

- QN-based traffic signal control trained in SUMO, using Deep Reinforcement Learning for adaptive signal timing. Cuts vehicle waiting time by ~80% vs fixed time controllers, showcasing AI driven urban traffic optimization.

### CardioML | <https://github.com/ZayyanCPU/CardioML>

- This project focuses on leveraging various supervised classification algorithms, such as Support Vector Classifier (SVC), Naive Bayes, Decision Trees, Random Forest, Logistic Regression etc, to predict the likelihood of different diseases based on multiple input features.

### TokenScope | <https://github.com/ZayyanCPU/cryptocurrency-data-analysis>

- Developed a data analysis pipeline that fetches live cryptocurrency data via APIs, cleans and processes it using Pandas, and generates insights through statistical analysis and visualizations. Delivered trend reports and volatility analysis using various plotting techniques i.e. Matplotlib for better decision making.

## SKILLS

- **Machine Learning & AI:** AI Agent Workflows, Computer Vision, Recommender System, Natural Language Processing, Hugging Face (Transformers, Pretrained LLMs), Model Fine Tuning, Deep Q-Learning, RAG & LangChain
- **Data Science:** SQL, Data Engineering, Exploratory Data Analysis, Feature Engineering, Data Pipeline
- **MLOPs Tools:** Docker, Git, GitHub Actions, MLflow & Neptune, Data Version Control, Apache Airflow, AWS SageMaker, Microsoft Azure

## CERTIFICATIONS

- **Machine Learning Specialization: DeepLearning.AI**
- **Gen AI Foundational Models for NLP & Language Understanding: IBM**
- **Generative AI Engineering and Fine-Tuning Transformers: IBM**
- **Generative AI and LLMs: Architecture and Data Preparation: IBM**