# MASUD SAJID

Lane 2, Askari 5, Lahore

### Education

#### **FAST NUCES**

August 2021 – Present (Expected December 2025)

Bachelor of Science in Computer Science

Lahore, Punjab

#### Relevant Coursework

- Data Structures
- Advanced Programming
- Algorithms Analysis

- Database Management
- Software Engineering
- Software Design Analysis

- Artificial Intelligence
- Computer Networks

# Work Experience

## AI Developer

June 2025 - Present

Lahore, Pakistan

Orbithinx

- Enhancing an AI-powered health management system by integrating Flask, PostgreSQL, MySQL, and OpenAI GPT models.
- Implemented vector search using PGVector and built RAG-based pipelines with LangChain for efficient document retrieval.
- Collaborating with the team to handle client queries and optimize chatbot response accuracy and speed.
- Streamlined data pipelines for health analytics and automated workflows to improve operational efficiency.

## AI Engineering Intern

May 2025 - June 2025

 $Lahore,\ Pakistan$ 

GSPEC TECH

— Developed a scalable chatbot creation system for organizations using OpenAI's LLM, Flask, Pinecone, and MySQL.

- Engineered a document-based QA system processing 4,441+ text chunks from diverse formats (PDF, TXT, CSV, DOCX, MD, HTML, JSON).
- Used HuggingFace's all-MinilM-L6-v2 to generate 384-d embeddings and implemented semantic search via Pinecone.
- Integrated LangChain to enable context-aware, 3-sentence responses with a 3-document retrieval window and temperature-controlled generation.
- Showcased expertise in vector databases, document preprocessing, and scalable, domain-specific LLM-powered systems.

#### Technical Skills

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

Tools: VS Code, Google Colaboratory, MSSQL Server, Jupyter Notebook, MS Excel, Power BI, Anaconda, Git

Technologies/Frameworks: Linux, GitHub, WordPress, Flask, Streamlit, Docker, FastAPI

AI/ML Libraries: NumPy, Pandas, Scikit-learn, TensorFlow, Keras, PyTorch, OpenCV, Matplotlib

Other Skills: REST APIs, Model Training & Evaluation, Data Preprocessing, Feature Engineering, Hyperparameter Tuning, Model Deployment, Data Visualization

## **Projects**

## Distance Matrix Optimization | Google Sheets, Google Apps Script, Google Maps API

March 2025

- Developed a script to fetch real-time distance and travel time between 15 sources and 500 destinations, using Google Maps API.
- Optimized routing based on weight constraints, minimizing travel costs for logistics planning.
- Automated data fetching and visualization in Google Sheets, highlighting key insights for decision-making.

#### Certifications

#### Google Data Analytics Professional Certificate

Aug 2023 - Dec 2023

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- Acquired hands-on experience in data cleaning, ensuring data integrity, and maintaining data quality.
- Developed expertise in database management systems (DBMS) and Microsoft Excel for data analysis.
- Learned R programming, Power BI, and SQL for data visualization and reporting.

## Leadership / Extracurricular

# President, IEEE NUCES Lahore

Aug 2024 - Present

FAST-NU, Lahore, PK

- Built and led a team of 50+ members to revamp and expand the society.
- Organized a cybersecurity workshop with an audience of 100+ participants.
- Implemented structural improvements to enhance operational efficiency and outreach.