

Zeba Mushtaq

643-G Block Gulshan e Ravi, Lahore

LinkedIn: www.linkedin.com/in/zeba-mushtaq

GitHub: <https://github.com/Zeba-Mushtaq>

Python Developer | AI & ML Engineer | Data Analytics

Phone: (+92)-347-5504010

Email: zebamushtaq4010@gmail.com

PROFESSIONAL SUMMARY

CS graduate (AI major, CGPA 3.4) with hands-on experience building AI-powered systems, automated data pipelines, and full-stack ML applications. I've shipped projects end-to-end — from LSTM-based energy forecasting to NLP chatbots and cloud-deployed dashboards — and I'm comfortable across the full stack, from raw data cleaning to production deployment. I work with Python, REST APIs, Azure, and AWS, and I've built with LLM APIs including OpenAI and Claude/Anthropic. Outside the technical side, I run a travel content brand and won a Bronze Prize at the Asian Young Creator Awards 2023 in Seoul — which basically means I'm equally serious about the work and the story behind it.

EDUCATION

University of Central Punjab, Lahore Feb 2022 – Feb 2026 BS Computer Science — Major: Artificial Intelligence & IT | Minor: Data Analysis | CGPA: 3.4/4.0

WORK EXPERIENCE

DataVerse Analytics

Jul 2025 – Sep 2025 Intern, Data Analyst (Remote)

- Ran EDA, ETL, and analysis pipelines in Python and SQL — improved data-driven decision speed by 30%.
- Built Tableau dashboards and automated preprocessing pipelines, cutting data processing time by 25%.
- Collaborated using Git/GitHub; documented all data workflows for cross-functional handoff.

AI Automation Intern (Self-Initiated)

Jul 2025 – Sep 2025 Remote

- Built automation scripts in Python for data cleaning and automated report generation.
- Researched and evaluated no-code/low-code automation tools for CRM and operational workflow use cases.

Rana Science & Commerce Academy

Oct 2022 – Feb 2023 Teaching (Part-Time, On-Site)

- Delivered syllabus-aligned lessons and one-on-one tutoring; maintained student performance records.

PROJECTS

Tourist Sentiment Analytics Dashboard | Streamlit + NLP

- Built a full sentiment analysis pipeline on a 10,000-row travel behavior dataset using Python, NLP, and Streamlit.
- Designed dark-themed interactive visualizations for destination trends, sentiment scores, and behavioral patterns.
- Deployed live at travel-sentiment-zeba.streamlit.app; published a complete story-driven Jupyter notebook on Kaggle.
- Cross-posted technical write-ups on Hashnode, Medium, DEV.to, and DataTalks.Club with community engagement.

Travel with Zeba — AI Chatbot | Vercel Deployment

- Built and deployed an AI-powered travel chatbot with a custom UI using Next.js and Vercel.
- Integrated LLM APIs for personalized destination recommendations; live at travelwithzeba.vercel.app.

AI Microgrid Forecasting System | LSTM + GEFCom2014

- Built three separate LSTM forecasting models for load, solar, and wind energy using the GEFCom2014 dataset in Google Colab.

- Tuned early stopping, lag features (W1–W25), and meteorological inputs; implemented EMS dispatch simulation and correlation matrix analysis.
- Delivered full client package: Jupyter notebook, Streamlit app, thesis report, and PowerPoint presentation.

AI-Based Destination Explorer | NLP Chatbot & Recommendation System

- Final year project — built a full-stack NLP chatbot and ML recommendation engine using Python, ReactJS, NodeJS, and MongoDB.
- Designed the AI/NLP module for real-time personalized travel recommendations; served via REST APIs.

House Price Prediction Web App | Regression + Azure Deployment

- Developed a regression-based prediction model in Scikit-learn; deployed via Flask on Azure with CI/CD integration.
- Handled feature engineering, model selection, and evaluation (R^2 , RMSE); documented the full ML workflow.

Data Analysis & Visualization | Python + Tableau

- LinkedIn job market analysis and COVID-19 regional comparison dashboards using Python, Pandas, and Tableau.
- Full data cleaning pipelines: missing value handling, outlier detection, and feature normalization for downstream ML tasks.

TECHNICAL SKILLS

Languages & Scripting: Python (pandas, numpy, scikit-learn), SQL, JavaScript, C++, C, C#

AI & ML: LSTM, NLP (text classification, sentiment analysis), regression/classification, feature engineering, EDA, ML pipeline design, LLM APIs (OpenAI, Claude/Anthropic)

Data & Visualization: Tableau, Power BI, Streamlit, Matplotlib, Seaborn, Jupyter Notebook, Excel

Web & Full-Stack: React, Next.js, Node.js, Flask, FastAPI, HTML/CSS, Tailwind CSS, Framer Motion

Databases & Backend: MongoDB, MySQL, Firebase (Auth, Firestore), Supabase

Cloud & Deployment: Azure, AWS, Vercel, Firebase Hosting, CI/CD pipelines, Google Cloud

Tools & Platforms: Git/GitHub, Google Colab, Kaggle, Microsoft Agent Framework, Agentic Workflows

Content & Blogging: Hashnode (zebabuilds.hashnode.dev), Medium (@zebamushtaq), DEV.to (dev.to/zebamushtaq), DataTalks.Club, X (@Zebosphere_30)

CERTIFICATIONS

- Google Cloud — Associate Cloud Engineer (Google Cloud Certified)
- AWS Academy Cloud Foundation — AWS Academy
- Data Analysis with Python — freeCodeCamp
- Diploma in Advanced Web Technology — Institute of Computing & Emerging Sciences
- English Language Course — Institute of Computing & Emerging Sciences

LEADERSHIP & ACHIEVEMENTS

Microsoft Learn Student Ambassador (MLSA) Oct 2025 – Feb 2026 *President, University of Central Punjab Chapter*

- Led the UCP MLSA chapter — organized workshops, hackathons, and career outreach including sessions on Agentic Workflows, AI Careers, MERN Stack, and the Webverse Hackathon.
- Achieved MLSA Beta recognition from Microsoft; expanded campus participation through structured outreach.

Bronze Prize Winner — Asian Young Creator Awards 2023, Seoul, South Korea

- Awarded at an international creative competition for outstanding content creation and innovation.

Women Empowerment Leader

Shahnazi Foundation

- Led awareness and guidance initiatives focused on women's education, confidence-building, and social empowerment.

Volunteer Educator

2025 Ibtida Society

- Designed and delivered structured interactive lessons for underprivileged children; provided one-on-one learning support.

LANGUAGES

English (Fluent) • Urdu (Native) • Punjabi (Limited Working) • Korean (Fair) • German (Basic)