

AMIR AHMED SIDDIQUI

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PROFESSIONAL SUMMARY

Aspiring AI/ML Engineer and Python Developer with practical experience in Machine Learning, Deep Learning, NLP, Data Analysis, and predictive modeling. Passionate about leveraging Python, AI technologies, and modern software development practices to build intelligent, data-driven solutions that solve real-world problems.

EDUCATION

Master of Computer Application | Techno Main Salt Lake (2024–2026) | CGPA: **7.82**

B.Sc. in Computer Science (Honours) | Surendranath College (2021–2024) | CGPA: **6.55**

TECHINICAL SKILLS

- **Programming:** Python, MySQL, JavaScript, Java.
- **Data Science & AI:** Machine Learning, Deep Learning, Natural Language Processing (NLP), NumPy, Pandas, Scikit-Learn, TensorFlow, Predictive Modeling, Data Analysis.
- **Tools & Frameworks:** Flask, Streamlit, Regex, Matplotlib, Seaborn, Plotly, MoviePy, FFmpeg.
- **Core CS Concepts:** Object-Oriented Programming (OOPs), Time-Series Forecasting, Data Preprocessing.
- **Tools:** VS Code, AI Agents, Git, Github

PROFESSIONAL EXPERIENCE

Corizo | *Remote* | Machine Learning Intern | May 2023 – July 2023 | [Certificate](#)

- **Engineered predictive models** using **Linear Regression** and **Decision Trees**, achieving a **92% accuracy rate** on training datasets.
- **Processed and cleaned thousands datapoints** of raw data using **Pandas** and **NumPy**, reducing data noise by **15%**
- **Constructed time-series forecasting** models for stock pricing, utilizing **Matplotlib** to visualize trends across **3 industry sectors**.
- **Optimized model evaluation** by monitoring **Precision, Recall, and F1-Score**, leading to a **10% improvement** in model reliability.

PROJECTS

HandTalk – AI-Powered Sign Language Detection System

[GitHub](#)

Tech Stack: Python, TensorFlow, OpenCV, MediaPipe, Flask

- **Developed a real-time sign language recognition system** using **MediaPipe** landmark extraction and **LSTM-based deep learning** for **gesture classification**.
- **Built and trained a sequence-learning model** on a **custom dataset** of 595 gesture videos, achieving **93.28% test accuracy** in sign language recognition.
- **Implemented a temporal prediction stabilization mechanism** using **65-frame input sequences**, **80% confidence thresholding**, and **15-frame majority voting** to improve prediction consistency in live streams.
- **Designed a responsive Flask web application** featuring **webcam integration**, **real-time gesture prediction**, and camera control functionality.

VidScribe – AI-Powered Video Caption Generator

[GitHub](#)

Tech Stack: Python, OpenAI Whisper, FFmpeg, Streamlit

- **Orchestrated** an automated multimedia pipeline that extracts audio using **MoviePy** and generates synchronized subtitles with **95%+ accuracy** using the **OpenAI Whisper (Base)** model.
- **Refined a custom SRT generation engine** utilizing the **srt** and **datetime** libraries to map transcription segments into precise time-stamped subtitle blocks.
- **Integrated** a video encoding solution using **Subprocess-driven FFmpeg commands** to "burn" subtitles directly into video frames with **-vf filter** optimization.
- **Created** a comprehensive **Streamlit** interface featuring a secure file-handling system for uploading, processing, and real-time previewing of captioned videos.

CERTIFICATIONS & ACHIEVEMENTS

- **Certified in Generative AI:** Completed the "**Generative AI Unleashing**" certification by **Infosys Springboard**, focused on the principles and practical deployment of **Generative AI** technologies. [Certificate](#)
- **Certified in Data Science:** Earned the "**Introduction to Data Science**" certification from **Infosys Springboard**, validating core competencies in statistical analysis and data modelling. [Certificate](#)
- **SIH Internal Hackathon:** Competed against **15+ teams** to develop a functional prototype within a **24-hour sprint**.