Riya Singh

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EDUCATION

VIT Bhopal University   **09/2022 – 05/2026**
B.Tech in Computer Science - 8.83 GPA   *Bhopal, India*

TECHNICAL SKILLS

- **Programming Languages:** Python | **Libraries & Tools:** NumPy, Pandas, Scikit-learn, OpenCV, Git | **Miscellaneous:** N8N, Firebase, MySQL

PROJECTS

DataGlow   **03/2025**
Technologies: Python, Streamlit, Scikit-learn, Pandas, NumPy, Plotly, CSV, Random Forest, SVM

- Developed a comprehensive data preprocessing and machine learning web application using Streamlit framework to automate data cleaning, transformation, and predictive modeling workflows for CSV and Excel datasets.
- Built an interactive multi-page application with Streamlit, integrating scikit-learn algorithms including Random Forest Classifier and Support Vector Machine (SVM), configured with 70-30 train-test split, and real-time model training capabilities with accuracy scoring and confusion matrix visualization.
- Implemented end-to-end ML pipeline featuring data upload validation, preprocessing operations (duplicate removal, missing value handling, normalization), model selection interface, and achieved real-time prediction functionality with downloadable processed datasets in CSV format.

Stock Prediction using LSTM   **09/2024**
Technologies: Python, NumPy, Pandas, PyTorch, Scikit-learn, LSTM

- Engineered a predictive time-series model utilizing over six years of historical stock data (2002-2008) to forecast future closing prices and identify market trends using deep learning techniques.
- Implemented a stacked Long Short-Term Memory (LSTM) neural network with Keras and TensorFlow, configured with 15-day lookback window, 50 LSTM units per layer, 0.2 dropout rate, and Adam optimizer with 0.001 learning rate, processing normalized financial indicators including Open, High, Low, Close, and Volume.
- Validated model performance by tracking Root Mean Squared Error (RMSE) on the test dataset and visualized the predicted versus actual stock prices to confirm the model's forecasting accuracy.

CO-CURRICULAR

iOS Club | Technical Co-Lead   **10/2023 – 05/2025**
- Assisted in organizing and coordinating Techastra (Dec 2023), a flagship technical event with 150+ participants
- Appointed as Technical Co-Lead in April 2024, leading technical project development, innovation initiatives, and team mentorship

Smart India Hackathon 2024 | National Finalist   **12/2024**
- Selected among top 6 national teams for the hardware problem statement: *Development of a Cost-Effective Myoelectric Prosthesis*
- Designed and fabricated a transradial prosthetic hand using recycled 3D-printed materials and low-cost sensors, achieving 92% cost reduction

HOBBIES & EXTRA-CURRICULAR

- Engage in daily practice on Elevate and Lumosity to improve cognitive skills such as memory, focus, and processing speed
- Regularly engage in Sudoku to sharpen problem-solving and critical thinking abilities
- Trained 10M air pistol shooter with competitive experience up to the North Zone level