# VISHESH SHAH

■ shahvishesh893@gmail.com | in LinkedIn: Vishesh-Shah | GitHub: Vishesh-69

# **Professional Summary**

- \* Expertise in framing and solving business problems using mathematical models and collaborating across diverse teams
- \* Proficiency in TensorFlow, Scikit-learn, and Machine Learning, Deep Learning, and Natural Language Processing.
- \* Strong analytical skills backed by a solid foundation in engineering, statistics, and mathematics along with strong grasp of Data structures and Algorithms.

# **Projects and Leadership**

#### **Movie Recommender System** [Python, Flask, ML, Collaborative filtering]

- I created a Flask app utilizing item-based collaborative filtering algorithms, improving movie recommendations based on current trends, which led to enhanced user engagement by providing personalized movie suggestions.
- It comprises of matrix factorization technique which helps suggesting user movies which are most similar to the movies he/she watched before.
- I expanded user search capabilities by implementing a genre-based search feature, resulting in easier movie discovery.

#### *Image Compression* [Python, Render, Ml(K-means) algorithm, Flask]

- I built a Flask app for image compression using the k-means algorithm, reducing image size by maintaining visual quality, which resulted in significant storage savings without compromising image integrity.
- This app reduces the size of image by up to 70 percent while maintaining high quality.
- The app features batch processing capabilities, enabling users to compress multiple images simultaneously.

### **Auto ML Model** [Python, Streamlit, ML, Data Analysis]

- I developed a machine learning model and a Streamlit app, achieving the automatic selection of the optimal algorithm by evaluating performance metrics, which resulted in more efficient and accurate data analysis.
- I boosted data science productivity by implementing an automatic algorithm selection system, resulting in faster project turnaround times.

## Stock Price Prediction [Python, Tensorflow, LSTM, Data Analysis]

- I developed an LSTM machine learning model to predict future stock prices by analyzing historical data, resulting in more accurate market forecasts and informed investment decisions.
- The model's performance was validated through backtesting on historical data, showcasing its robustness and reliability.

#### Parkinsons Disease Classification [Python, Tensorflow, DNN, Exploratory Data Analysis]

- I developed a Parkinsons disease classification and firstly performed exploratory data analysis for data preprocessing and achieved 95 percent accuracy
- The classification model's high accuracy demonstrates its potential for early detection and improved patient outcomes.

#### Education

#### Bachelor's Degree in Computer Science and Engineering

### Gujarat Technological University - Ahmedabad

NOV 2022 - PRESENT

- Engaged in a Computer Science degree, focusing on technical fundamentals.
- Mastered algorithms, data structures; adept in Java, Python, C++.
- Acquired expertise in problem-solving through algorithmic analysis and programming.

# **Key Courses**

#### IBM Data Science Professional Certificate

#### IBM - Verify

- Earned the Data Science Professional badge certified by IBM and the American Council of Education.
- Gained proficiency in the entire data science lifecycle, from data acquisition and cleaning to exploratory analysis, feature engineering, model building, and deployment.
- Explored a range of machine learning algorithms for both supervised and unsupervised learning tasks, including model evaluation and optimization.

#### Deep Learning Specialization

#### Stanford University - Verify

- Proficient in Deep Learning, CNNs, RNNs, Transformers; applied in projects.
- Developed projects: Image Detection, Spam Email Classifier, Neural Style Transfer.
- Acquired extensive knowledge in attention models and advanced ML and DL techniques.

## **Skills**

- Data Science and Machine Learning :: TensorFlow, Scikit Learn, ML Algorithms, Deep learning, ANN, CNN, RNN, NLP, LSTM (and other different networks), Colab, LLM's, Numpy, Matplotlib, Dash, Pandas, Polar.
- **Programming Languages** :: Expertise in Python, Java, R. Familiar with C, C++, Javascript, Linux.
- Mathematics :: Linear Algebra, Probability, Statistics, Calculus, and other mathematical concepts.
- **Development** :: MLOps, Heroku, render, Netlify, HTML5, CSS, JavaScript, Flask, StreamLit, SQL
- **Miscellaneous** :: Prompt engineering, working with LLM's, Problem solving using Data Structures and Algorithms, Mathematics, Implementation Of Research Papers, Software development, Product Management, DBA.

# **Achievements and Certifications**

- Professional Data Science Badge American Council Of Education
- Deep Learning Professional Badge American Council of Education
- Machine Learning Specialization Stanford
- Google professional badge for product development American Council of Education
- Google Specialization Project Management Google
- Python programming Harvard
- Psychology Yale University
- Front End web-development Meta (Facebook)