TEJASWI MAHADEV

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PROFESSIONAL SUMMARY

Al/ML Enthusiast and motivated machine learning undergraduate with experience in data analysis, algorithm development, and research. Proven ability to collaborate on interdisciplinary projects and apply cutting-edge techniques in machine learning. Seeking opportunities to contribute to Al-driven projects in a challenging environment that fosters continuous learning.

EDUCATION

Bachelor of Technology, Computer Science

2022 - Present

Malla Reddy University, Hyderabad

Minor: Artificial Intelligence and Machine Learning CGPA:

8.98/10

Intermediate Education 2019 – 2021

Sri Chaitanya Junior Kalasala, Hyderabad Grade:

Distinction

EXPERIENCE

Academic Research Assistant

July 2024 – September 2024

Dr. Jnan Yalla, Malla Reddy University, Hyderabad

- Conducted research on classical and quantum optimization techniques for financial portfolio management.
- Analyzed performance differences between traditional and quantum models, conducting extensive simulations on large-scale datasets to evaluate performance in complex financial scenarios.
- Contributed to literature review and research publication on quantum machine learning applications.

Machine Learning Trainee

June 2024 - August 2024

SmartLearn EdTech, Hyderabad

- Explored convolutional neural networks (CNN) and generative models, collaborating on product development by applying TensorFlow and Keras libraries.
- Optimized feature extraction algorithms, reducing data processing time by 20% and increasing overall model accuracy by 15%

Project Showcase Participant

July 2024

IntelliThon, Malla Reddy University, Hyderabad

- Spearheaded the design and development of a healthcare assistant chatbot for symptom diagnosis.
- Integrated generative AI to enhance patient-doctor interactions.

PROJECTS

Movie Recommendation System

Academic Project

- Developed a hybrid movie recommendation system using collaborative filtering, content-based filtering, and matrix factorization techniques.
- Utilized the Scikit-learn and Surprise libraries to build and fine-tune recommendation models, achieving 85
- Integrated similarity metrics such as cosine similarity and Pearson correlation for better user and item-based recommendations.
- Implemented advanced model evaluation techniques like Root Mean Squared Error (RMSE) and Mean Absolute Error (MAE) to measure accuracy.

• Designed an interactive UI with Streamlit, enabling users to explore personalized movie suggestions based on their preferences.

Library Management System

Academic Project

- Engineered an efficient library management system using SQLite as the database backend and Streamlit for a user-friendly interface.
- Implemented CRUD operations (Create, Read, Update, Delete) and advanced search functionality for books, enhancing efficiency by 25
- Utilized regular expressions and search algorithms for better book categorization and retrieval based on title, author, and genre.

Budget Tracking and Management System

Academic Project

- Created a budget tracking tool using Python and machine learning models such as Support Vector Regression (SVR) and Linear Regression.
- Developed predictive models using time series forecasting techniques, enabling users to anticipate future spending trends
 and make informed financial choices that enhanced budgeting confidence among active app users.
- Integrated data visualization tools like Matplotlib and Plotly to provide clear graphical representations of spend-ing trends.

SKILLS

Programming Languages: Python, Java, SQL

Machine Learning AI: Deep Learning, Generative AI, Model Optimization, Natural Language

Processing (NLP)

Libraries & Frameworks: TensorFlow, Keras, PyTorch, Scikit-learn, NumPy, Pandas, OpenCV

Database Management: MongoDB, SQLite,Firebase **Frontend Development:** HTML, CSS, JavaScript

Data Visualization: Matplotlib, Plotly **Tools:** Jupyter Notebook, VS Code

Soft Skills: Problem Solving, Communication, Leadership, Analytical Thinking

CERTIFICATIONS

Scalable Machine Learning on Big Data using Apache Spark – Coursera (IBM)

Introduction to Data Analytics – Coursera (IBM)

Al for Everyone – Coursera (DeepLearning.Al)

Introduction to Cybersecurity Tools and Cyberattacks – Coursera (IBM)

Introduction to MongoDB – MongoDB University