Venkata Sai Abhigna Devarasetty

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Professional Experience

Mu Sigma Business Solutions *Bangalore, India*

Apprentice Leader June 2022 – July 2022

- Guided a team of data scientists through complex analytical challenges, enforcing best practices in model development and data preprocessing; resulted in a 20% rise in model accuracy and 10% faster data pipeline deployment

Data Scientist - II January 2021 – May 2022

- Spearheaded the migration from in-house language Phoenix to React, achieving a 35% performance improvement and enhancing user experience and system efficiency
- Implemented Elastic Search for data retrieval, reducing query times from 10 to 5 seconds, which enhanced data accessibility and user productivity in analytical tasks
- Collaborated with multidisciplinary teams to translate user requirements into technical solutions, bridging the gap between software development and data science

Data Scientist - I May 2019 – December 2020

- Addressed data preprocessing issues and implemented feature engineering enhancements in the algorithm team, resulting in 10%-15% improvement in model performance for predictive analytics
- Developed data visualization strategies to convey complex trading insights, enabling end-users to make informed decisions and achieve at least 10% returns on each trade
- Incorporated statistical techniques like correlation analysis to identify high-potential currency pairs (correlation $\geq$ 0.7), enhancing team profitability and data-driven decision-making

Projects

- **Comparative Study of GNN-Based Recommendation Systems:** Improved recommendation accuracy and computational efficiency by analyzing LightGCL, SimGCL, and XSimGCL models using the MovieLens 100k dataset
- **MRI Registration via Deep Learning:** Achieved DICE scores of 0.828 (uni-modal) and 0.817 (multi-modal) using TensorFlow, Keras, and U-Net, optimizing VoxelMorph for better registration precision
- **Walmart Forecasting Enhancement:** Implemented a sales forecasting model using statistical techniques and ML algorithms, with 75% accuracy on Walmart's historical data, enhancing decision-making and inventory management
- **LinkedIn Job Market Analysis:** Analyzed job postings using GCP, BigQuery, and Looker Studio to extract insights on trends, skill demands, and hiring patterns, enhancing data-driven decision-making
- **OutfitAI:** Created a multimodal GenAI app to analyze clothing images and recommend similar items and purchase locations. Utilized LangChain and Vertex AI for processing and designed a user-friendly interface with Streamlit, optimizing real-time performance

Skills

Languages: Java, Python, C, C++, SQL, Redis, JavaScript, HTML, CSS, R
Frameworks: React, Node.js, Selenium, Material-UI, RestAPI, Express, D3, Kafka, Socket.io
Developer Tools: Git, Docker, Kubernetes, VS Code, IntelliJ, Eclipse, Tableau, Excel, R Shiny, CI/CD, Shell Scripting
Libraries: Pandas, NumPy, Matplotlib, TensorFlow, Keras, D3.js, SciPy, Scikit-learn, Matplotlib, PyTorch
Databases & Cloud Technologies: MySQL, PostgreSQL, NoSQL, BigQuery, GCP, AWS
Machine Learning & Data Science Techniques: Forecasting Models, Ensembling Methods, Statistical Analysis, Data Visualization, LangChain, LLM, GANs, RAGs

Education

Indiana University Bloomington, Indiana
Master of Science in Data Science

Vasireddy Venkatadri Institute of Technology, Guntur, India
Bachelor of Technology in Computer Science

Recognitions

- Awarded 3 Spot Awards at Mu Sigma for exceptional performance and contributions to Data Catalog project and Pair trading project
- Recognized with an Impact Award at Mu Sigma for pioneering enhancements in the data catalog project, resulting in a 35% increase in data utilization and contributing to organizational growth