Lohith Prasanna Teja Kakumanu

716-907-7542 | lohithprasannateja@gmail.com | LinkedIn

EDUCATION

Master of Science: Data Science & Analytics, University at Buffalo, The State University of New York,
Grade: 4.0/4.0, December 2024
Bachelor of Technology: Electronics & Communication, VVIT, India, Grade: 7.3/10.0, September 2020

SKILLS

Programming & Interrelated: Python, R, SQL, Numpy, Pandas, Data Mining, TensorFlow, JAVA, PyTorch, Geospatial optimization
Data Science: Probability, Linear Algebra, Statistical Modelling, classification, clustering, regression, neural nets, Hypothesis Testing, A/B Testing, RAG, NLP, LLM, LangChain, EDA, Gen AI, ETL, SSIS, SSAS, SSRS, SQL Queries, Research-Multimodal Deep Learning,
TOOLS: Azure Databricks, Jupyter, Visual Studio, Power BI, Tableau, AWS, Scala, Prompt Tuning, Excel, IBM Watson, SAS
Leadership: Innovation, cross-team collaboration, communication, Organizational, storytelling, Interpersonal, Knowledge-Transferring

WORK EXPERIENCE

Data Scientist, Infosys India Pvt. Ltd., India: July 2021 – August 2023

- **Boosted Sentiment Analysis:** Revamped accuracy of sentiment analysis from 88% to 95% leveraging NLP, Transformers, and Power BI, saving 10% on employee program budgets, directly contributing to significant cost savings for business.
- **NLP and Gen AI Chatbot Development:** devised a generative AI chatbot using advanced NLP techniques, overhauling customer interaction and satisfaction by 15% and reducing support load.
- **Predictive Maintenance with Deep Learning:** created LSTM and CNN models to forecast equipment failures, reducing downtime by 30% and maintenance costs by 20%.
- **Data Modeling and OLAP:** Engineered multi-dimensional data models and OLAP cubes, strategically optimizing schema design, boosting user experience by 15% in dashboards.
- **Regional Inventory Management:** strengthened inventory control and operational efficiency by 15% for a regional Walmart division using **time series forecasting** with machine learning techniques (XGBoost, Ridge, Random Forest, Linear Regression) on 2023 sales data.
- **ETL Process Automation:** Streamlined ETL processes by integrating data from multiple sources (MySQL, PostgreSQL) via SSIS, leading to a 12% improvement in efficiency.

Data Science and BI Engineer, Infosys India Pvt. Ltd., India: September 2020 – July 2021

- **Data Modeling and SQL Optimization:** Led data modeling and design efforts, including SQL development and optimization of stored procedures resulting in a 25% enhancement in data quality.
- **Resource Planning Optimization:** Conducted Exploratory Data Analysis for Infosys Project Alcon System, improving resource planning and optimization by 10%.
- **System Integration:** Spearheaded a project integrating OLTP and OLAP systems, resulting in a 40% reduction in query response time and a 25% increase in data processing efficiency.
- **Performance Optimization:** Developed intricate DAX measures and enforced Row-Level Security in numerous reports, enhancing report performance and reliability, increasing business stakeholder confidence and satisfaction.
- **Predictive Modeling:** Achieved a 20% reduction in patient readmission rates by developing predictive models using ensemble learning techniques such as Random Forest (RF) and Gradient Boosting (GB), enabling early identification of high-risk patients.
- **Power BI Enhancement:** directed performance tuning and optimization of Power BI reports and dashboards, reducing load times by 20% and revamping overall user experience.
- **Interactive Dashboards:** Orchestrated deployment of cubes to the Analysis Server, translating business concepts into interactive Power BI dashboards.

PROJECTS

Predictive Analysis for crime hotspots in India: Python, Jupyter

- Implemented predictive modeling techniques to identify underlying factors and predict future crime rates for various crime types (e.g., rape, cruelty by husband, dowry deaths). Analyzed data to observe a negative correlation between states' economic growth and crime rates, providing actionable insights for policymakers.

US Presidential Election using Sentiment Analysis using Twitter: Python, NLP, Jupyter, snscrape, LSTM, BERT

- Forecasted winning candidate for the US Presidential Election by analyzing tweets with NLP techniques and pretrained models from Hugging Face. Project offered decision makers and political analysts' insights into public opinion trends and shifts, identifying influential topics to optimize campaign strategies and improve voter engagement.

Customer Segmentation using Clustering: Python, Jupyter

- Performed customer segmentation with K-means clustering to group customers with similar characteristics, aiding decision makers in executing targeted marketing, and understanding customer segment preferences.

Applicant Tracking System using LangChain and Generative AI: Python, Gen AI, LangChain, Prompt Engineering & Prompt Tuning

- Designed an ATS application to boost resume content, validate skill sets, and streamline job application processes, significantly expanding success rate of initial screenings.

AWARDS AND ACHIEVEMENTS

- Active member of IEEE and served as a Design Council Head of IETE Student Chapter (2018-2020), VVIT.
- Infosys Certified Data Science Professional using Python and SQL.
- Recipient of recognition INFY-RISE award for independently managing a complex project.
- Mastered life prioritization by honing goal setting, time management, and meaningful connections.