

Lohith Prasanna Teja Kakumanu

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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 sentiment analysis **accuracy** from 88% to 95% leveraging NLP, Transformers, and Power BI, saving 10% on employee program budgets and reducing costs 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:** leveraged **LSTM** and **CNN** models to forecast equipment failures, reducing downtime by 30% and maintenance costs by 20%.
- **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:** Led a team of 5 in streamlining ETL processes by **integrating** data from multiple sources (MySQL, PostgreSQL) via **SSIS**, generating a 12% improvement in efficiency.
- **Statistical Analysis:** Leveraged **SAS** for advanced statistical analysis, improving data quality and reliability by 20%, which enhanced the decision-making process for business stakeholders.

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

- **Data Modeling and SQL Optimization:** Directed data modeling and design efforts, including SQL development and optimization of **stored procedures** resulting in a 25% enhancement in data quality, 35% increase in data accessibility.
- **Cloud Analytics:** Utilized **Azure** for scalable data analytics, achieving a 40% improvement in data accessibility and a 25% reduction in operational costs.
- **Resource Planning Optimization:** Led **Exploratory Data Analysis** for Infosys Project Alcon System, improving resource planning and optimization by 10%.
- **Performance Optimization:** Developed **DAX** measures and enforced **Row-Level Security** in 10+ reports, enhancing performance and reliability, resulting in a 30% increase in stakeholder satisfaction and confidence.
- **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), identifying high-risk patients early.
- **Power BI Enhancement:** Directed **performance tuning** and optimization of Power BI reports and dashboards, reducing load times by 20% and revamping overall user experience by 15% in dashboards.

PROJECTS

Predictive Analysis for crime hotspots in India: Python, Jupyter

- Engineered advanced predictive modeling techniques to forecast crime rates, revealing a 15% decrease in crimes in states experiencing 5% or more economic growth, assisting policymakers in strategic planning.

US Presidential Forecasting using Sentiment Analysis: Python, NLP, Jupyter, snsrape, LSTM, BERT

- Analyzed 500K+ tweets with NLP techniques and Hugging Face models to forecast US Presidential Election winner; delivered data-driven insights to decision makers, enhancing campaign strategies and increasing voter engagement by 20%.

Customer Segmentation using Clustering: Python, Jupyter

- Executed customer segmentation with K-means clustering, grouping customers with similar characteristics, and enabling decision-makers to launch personalized marketing strategies, resulting in a 25% increase in customer engagement.

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

- Developed an advanced ATS solution to streamline job application processes, improving candidate skill validation and increasing initial screening success rates by 45%, reducing recruiter workload by 30%

AWARDS AND ACHIEVEMENTS

- Infosys Certified Data Science Professional using Python and SQL.
- Design Council Head of IETE Student Chapter, organizing 15+ events and workshops, engaging 200+ students at VVIT.
- Honored with the INFY-RISE award for navigating and executing a highly complex projects.
- Enhanced life prioritization through strategic goal setting, fostering meaningful relationships, resulting in a 35% improvement in work-life balance and a 25% increase in personal and professional achievements.