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Vishwanath Guruvayur

Data Scientist

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EDUCATION

University of Virginia (UVA)

Master of Science in Data Science

Charlottesville, VA

Jun 2024 - May 2025

Capstone Project [sponsored by LMI Inc.]: Implementing Multimodal RAG based LLM for Education

Research on methods to leverage Lecture PDFs, Slides & Videos in LLMs to develop an enhanced, context-rich learning experience.

Coursework: Statistical Machine Learning • Linear Models • Bayesian Machine Learning • Large-Language Models • Deep Learning • Big Data Systems • Applied Data Engineering • Data Mining • Data Ethics • Data Structures & Algo • Time Series Analysis

Birla Institute of Technology & Science, Pilani (BITS Pilani)

Bachelor of Engineering in Mechanical Engineering, Minor in Data Science

Hyderabad, India Aug 2018 – Dec 2021

SKILLS

Programming Languages: Python (NumPy, Pandas, Scikit-learn), R, SQL, JavaScript, C++, MATLAB AI & ML: Predictive ML, Deep Learning (PyTorch, TensorFlow, Keras), LLMs (LangChain), OpenCV, NLP Cloud & Data Tools: Azure (DataBricks, Data Factory, ML Studio), AWS (SageMaker, EC2, S3), Git, Docker, PySpark Visualization: Power BI, Plotly Dash, Advanced Excel (VBA, Power Query), d3.js

Professional Experience

Piramal Critical Care (PCC)

Bethlehem, PA (Remote, India)

Data Science Lead

Jan 2022 – Jun 2024

- Established and led the Data Science & Analytics Team, developing end-to-end data products across Supply Chain, Finance, and Sales to enable data-driven decision making and operational growth.
- Engineered automated **Data and ML pipelines** using Python & SQL, powering **over 30** action-oriented analytics dashboards across divisions, reducing manual reporting by 85% with real-time validation alerts.
- Introduced **Predictive Modeling** for actionable insights for market share and inventory optimization resulting in a **40**% improvement in supply chain efficiency and **\$1.2M** quarterly savings from reduced write-offs.

Project Highlights:

- Inventory Management Analytics & Forecasting

 Machine Learning | Supply Chain & Finance
 Implemented a time-series forecasting pipeline using S-ARIMA for SKU-level inventory prediction and Monte Carlo
 simulations for scenario planning, reducing monthly write-offs through optimized aging stock management.
- Product Sales Market Share & Growth Analytics

 Engineered a market analytics framework using segmentation analysis and competitive benchmarking to evaluate market dynamics and identify growth opportunities, guiding long-term business strategies.
- Sentiment Analysis Modelling of Employee's Feedback

 Natural Language Processing | HR

 Built an ensemble sentiment analysis pipeline combining VADER and TextBlob to analyze employee feedback, extracting key insights to inform personalized development plans and improve employee satisfaction.

Piramal - Consumer Product Division (CPD)

Data Science Intern

Mumbai, India

Jul 2021 – Dec 2021

• Collaborated with cross-functional teams to develop analytical solutions for sales optimization and employee retention.

Project Highlights:

- Product Recommendation Engine

Unsupervised Learning | Sales Operations

Developed company's first recommendation engine from scratch using FP-Growth algorithm to optimize product placement, enhancing market penetration by 15% quarterly and impacting over 400k retailers across India.

- Attrition Prediction Modelling

Machine Learning | Sales and HR

Developed a model ensemble of **XGBoost and Logistic Regression** to predict attrition among sales employees, achieving a **93% retention rate** for high-performing employees by leveraging performance metrics and key operational features.

CERTIFICATIONS

- AWS Certified Solutions Architect Associate
- AWS Certified Machine Learning Associate

Amazon Web Services (expected Jan 2025)

Amazon Web Services (expected Feb 2025)