

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 and Videos in LLMs to develop an enhanced, context-rich learning experience.

Coursework: Statistical Machine Learning • Bayesian Machine Learning • Large Language Models • Deep Learning • Big Data Systems • Linear Models • Applied Data Engineering • Text Mining and NLP • Data Ethics • Data Structures and Algorithms

Activities: Data Science Ambassador • TA - Statistical Machine Learning • Academic Village Resident (The Range)

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

Bachelor of Engineering in Mechanical Engineering, Minor in Data Science

Hyderabad, India

Aug 2018 – Dec 2021

SKILLS

Programming Languages: Python, R, SQL, JavaScript, C++, MATLAB, Scala, Julia

AI and 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 MS Excel (VBA, Power Query), d3.js

PROFESSIONAL EXPERIENCE

Piramal Critical Care (PCC)

Data Science Lead

Bethlehem, PA (Remote, India)

Jan 2022 – Jun 2024

- Established and **led the Data Science and 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 and 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 and Forecasting** Machine Learning | Supply Chain and 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 and Growth Analytics** Statistical Modeling | Finance and Sales
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.
- Recognized for exceptional performance, leading to an offer for the Data Science Lead role at Piramal Critical Care.

Project Highlights:

- Product Recommendation Engine** Deep 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 Amazon Web Services (expected Feb 2025)
- AWS Certified Machine Learning – Associate Amazon Web Services (expected Mar 2025)