

EDUCATION

University of Virginia

Master of Science in Data Science, GPA: 4.0/4.0

Charlottesville, VA

Jun 2024 – May 2025

Teaching Assistant - Statistical Machine Learning • Data Science Ambassador • Academic Village Resident (The Range)

Birla Institute of Technology and Science (BITS Pilani)

Bachelor of Engineering in Mechanical Engineering, Minor in Data Science, GPA: 3.8/4.0

Hyderabad, India

Aug 2018 – Dec 2021

EXPERIENCE

Machine Learning Researcher

LMI Inc. and UVA School of Data Science

Tysons, VA (Remote)

Nov 2024 – Apr 2025

Capstone Research on multimodal RAG in LLMs to enhance educational content retrieval and summarization quality.

- Developed an **end-to-end multimodal RAG pipeline** using Sentence Transformers and CLIP embeddings, indexing over **6,000 vectors** from educational text, images, and lecture audio for efficient semantic retrieval via Pinecone DB.
- Evaluated **three RAG frameworks** (Zero-Shot, Text-only and Image-augmented RAG) on educational content, improving retrieval accuracy and summarization quality across LLaMA and GPT-4 in diverse contextual settings.
- Awarded “Most Compelling Data Visualizations”** at the Capstone Showcase for impactful semantic clustering in topics and intuitive explainability in multimodal RAG systems.

Lead Data Scientist

Piramal Pharma Ltd.

Bethlehem, PA (Remote, Mumbai Office)

Jan 2022 – Jun 2024

Established and led the Data Science and Analytics Team for the Critical Care Division, mentoring a high-performing team of 3 data scientists and integrating advanced analytics with best practices into core business functions.

- Prevented \$1.2M in quarterly inventory losses** by designing a time-series based supply chain forecasting system leveraging S-ARIMA and Monte Carlo simulations to improve depleting stock visibility and optimizing replenishment cycles.
- Worked closely with the CFO to drive targeted market expansion strategies** through advanced sales analytics dashboards integrating market data, segmentation analysis, and competitive intelligence.
- Received the **“Piramal Excellence Award”** for building **over 30 data analytics pipelines** using Python and SQL, reducing reporting turnaround from monthly to daily and **boosting reporting efficiency by 85%**.
- Enabled CHRO-led talent development initiatives** by analyzing performance reviews via VADER sentiment analysis and topic modeling to personalize growth strategies.

Data Science Intern

Piramal Pharma Ltd.

Mumbai, India

Jul 2021 – Dec 2021

Interned in the Consumer Products Division, contributing to high-impact business-facing data science initiatives.

- Achieved **15% quarterly increase** in market penetration **across 400,000 retailers** by building the company’s first product recommendation engine implementing the FP-Growth algorithm from scratch.
- Boosted high-performing sales reps **retention rates to 93%** by developing an attrition prediction model using XGBoost and Logistic Regression on historic sales performance and attrition data.
- Recognized for impact by the CEO and **offered a leadership role to build and head a new analytics team**.

SKILLS

Programming Languages: Python, R, SQL, JavaScript

AI and ML: Traditional ML (Scikit-Learn), Deep Learning (PyTorch, TensorFlow), LLMs (LangChain, HuggingFace)

Cloud Data Tools: AWS (SageMaker, EC2, S3), Microsoft Azure (DataBricks, Data Factory, ML Studio), Git, Docker

Data Visualization: Power BI, Plotly Dash, d3.js, QlikSense

Interests and Hobbies: Singing and enjoying music - Carnatic Ragas, playing card games and badminton, robotics

CERTIFICATIONS

- AWS Certified Solutions Architect – Associate, *Amazon Web Services*
- AWS Certified Machine Learning – Specialty, *Amazon Web Services*

May 2025

Scheduled - Jun 2025