Rohith V S

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EDUCATION

University of Arizona, College of Information Science — Tucson, AZ
Masters in Information Science (Machine Learning) — May 2025

- Cumulative GPA: 3.7/4.0
- Relevant Coursework: Machine Learning, Data Visualization, Neural Networks, Data Mining & NOSQL Database

Vellore Institute of Technology, School of Computer Science and Engineering — Vellore, India
Bachelor of Technology in Computer Science and Engineering — June 2023

- Cumulative GPA: 9.0/10.0

PROFESSIONAL EXPERIENCE

Myntra — Bengaluru, KA, India
Senior Software Engineer — August 2023 - August 2024

- Developed a Retrieval-Augmented Generation (RAG) system using FastAPI**,** reducing document query response time by 73% and enhancing information retrieval efficiency.
- Engineered an AI-powered chatbot using React and FastAPI**,** capable of handling 400+ user interactions daily, contributing to improved customer engagement.
- Built and tested scalable web and mobile applications**,** optimizing for cloud environments and delivering seamless front-end and back-end user experiences..

SKILLS

- **Programming Languages:** Python, R, Java,C, C++, JavaScript, HTML, CSS, Node JS
- **Big Data & Machine Learning:** Spark, Hadoop, MongoDB, Python (e.g. scikit-learn, NumPy, pandas, matplotlib),Reinforcement Learning, Transfer Learning
- **Data Science Tools & Cloud Platforms:** A/B testing, ETL, Data science pipeline (cleansing, wrangling, visualization, modeling, interpretation), Statistics, Time series, Experimental design, Hypothesis testing, OOP, OOD, APIs, Excel, Git, Power BI, Tableau, Docker, AWS, Azure

RESEARCH AND PROJECTS

Graduate Researcher — Tucson, AZ
College of Information Science (University of Arizona – Advisor – Dr.Clayton Morrison) — January 2025 – May 2025

Real-Time Driver Attention Estimation Using Dash Cam Video Analysis *(Under review, 2025)*

- Developed a real-time driver attention monitoring system using CNN-LSTM architecture on dash cam video flow fields.
- Achieved 63.74% classification accuracy—doubling baseline performance—by categorizing attention states and triggering alerts.
- Proposed future enhancements including appearance-based feature integration to improve model robustness and safety outcomes.

Research Collaborator(Published in IEEE) — Vellore, India
School of Computer Science and Engineering (*Vellore Institute of Technology – Advisor-Dr.Karthikeyan)* April 2022 – June2024

- **Artificial Intelligence (AI) and Internet of Things (IoT) Optimizations in Smart Power Grids (AIIOT 2024)**
  Proposed an AI-integrated IoT-based smart energy meter to optimize household energy consumption by predicting and analyzing usage patterns using deep learning.
  Designed a real-time energy monitoring system that notifies users and suppliers of supply-demand thresholds, aiming to reduce oversupply and undersupply issues.
- **A Systematic Analysis on Raspberry Pi Prototyping: Uses, Challenges, Benefits, and Drawbacks (IOT Journal; Best Paper award)**

CAPSTONE — Tucson, AZ
AI-Driven Intraday Trading System(University of Arizona) — January 2025 - May 2025

- Built a sentiment-enhanced forecasting system that combines NLP (FinBERT) and TimeGPT to analyze financial news and predict short-term stock movements.
- Achieved Integrated Superposed Epoch Analysis (SEA) to uncover consistent stock price behavior around high-sentiment events, enabling pattern recognition and decision support.
- Automated the full data pipeline**:** from fetching financial news (NewsAPI), extracting companies (spaCy NER), mapping to tickers, forecasting with TimeGPT, and plotting actionable insights.
- Applied sector-diverse analysis across entertainment (DIS), agriculture (MOS), and tech/data (IRM), demonstrating model robustness across multiple industries.