




EDUCATION

Master of Science New Jersey Institute of Technology, NJ, USA	Graduating: May 2025
Major: Data Science Computational Track	GPA: 3.83
Coursework: Applied Statistics, Advanced Database Systems Design, Machine Learning, Deep Learning, Data Visualization	
Bachelor of Technology SRM University, AP, India	2017 - 2021
Major: Mechanical Engineering	GPA: 3.52
Awarded with merit scholarship of 50% tuition fee for the entire bachelor's degree	

EXPERIENCE

New Jersey Institute of Technology , NJ, USA	
Research Assistant NJIT Engineering Education Research	July 2024 - Present
<ul style="list-style-type: none">Collaborated with educational researchers to analyze real world institutional student data and identify factors affecting their academic performance using machine learning techniquesActively participated in data cleaning, handling missing data, and preparing datasets for analysis to ensure data quality and reliabilityDeveloped regression models, including Multiple Linear Regression (90.74% accuracy), Random Forest (91.04% accuracy) and XGBoost (91.14% accuracy), to predict student GPA using R	
Teaching Assistant CS-634 Data Mining Course	May 2024 - Present
<ul style="list-style-type: none">Responsible for grading weekly homework, quizzes, and course projects, ensuring timely feedback and fair assessmentsAssisted students with their course projects, guiding them through Python coding, while evaluating their code for final grading	
Research Assistant Data and Knowledge Engineering Lab	Sept 2023 - May 2024
<ul style="list-style-type: none">Integrated Explainable AI (xAI) tools and leveraged interpretability into deep learning tools used for space weather researchxAI tools like LIME, SHAP, Anchors, PDP and ALE plots are incorporated using Python into a transformer model named "SolarFlareNet"Successfully retrained the SolarFlareNet model without compromising the model's accuracy, maintaining an accuracy of 90.7%Presented a poster paper at the FLAIRS, an AI Conference, showcasing research findings to a professional audience	

PROJECTS

WebScraping Using R R, rvest, ggplot	Spring 2024
Capstone Project Data Analytics Using R Programming Course	 Github
<ul style="list-style-type: none">Developed a web scraping tool using the rvest package in R to collect articles (2008-2024) from an open-access journal "Parasites & Vectors"Implemented a unique scraping approach that minimizes resource usage by only fetching newly added articles after the initial data scrape, significantly reducing computational costs and timeCleaned the raw data using techniques such as regular expressions (regex) and conducted exploratory data analysis (EDA) using the ggplot	
eComputer Store Database System MySQL, Python, Streamlit, Pandas	Fall 2023
Capstone Project Data Managment Systems Design Course	 Github
<ul style="list-style-type: none">Developed a comprehensive database system for an e-commerce store using MySQL for back-end management, following a structured approach including the creation of ER diagrams and transforming them into a relational database schemaBuilt an interactive web-based user interface using Python's Streamlit library, enabling users to query and interact with the databaseDeployed the system on Github Pages, providing seamless access to the database for users through a fully functional web application	
AlgoTrade API Python, yfinance, Pandas, Tensorflow, ks-api-client	2023
Personal Project	 Github
<ul style="list-style-type: none">Developed a fully automated trading bot for NSE stocks using Python, integrating real-time and historical data with the yFinance libraryImplemented technical analysis by calculating technical indicators such as Moving Average, MACD, Bollinger Bands etc., with various trading strategies based on these indicators to automate buy/sell decisionsTrained machine learning models, including LSTM, using historical stock data to predict and forecast stock pricesIntegrated Kotak Securities API (ks-api-client) for executing live trades based on the generated strategies	

PUBLICATIONS

- Interpretable Deep Learning for Solar Flare Prediction — IEEE ICTAI 2024 (Accepted)
- An Interpretable Transformer Model for Operational Flare Forecasting — [FLAIRS 2024](#)
- Accelerating a Hypersonic CO₂ Reaction Solver — [IHMTc 2021](#)

SKILLS

Languages: Python, R, SQL, PL/SQL, Bash, JavaScript, C/C++	Databases: MySQL, Oracle, MongoDB, BigQuery
Analytics: Excel, Tableau, Power BI, D3.js	Version Control: Git, GitHub, GitLab
Other:	Operating Sys.: Linux, MacOS, Windows, UNIX
Cloud Sys.: AWS, Azure, GCP	Markup Lang.: \LaTeX , HTML, CSS, Markdown

ACHIEVEMENTS

Google Data Analytics Professional Certificate — Coursera	2023
Algorithmic Trading & Quantitative Analysis Using Python — Udemy	2023