Srijan Mallick

Work Experience

FeedSense AI Pvt. Ltd. (formerly Vista Intelligence Pvt. Ltd.)

Jul, 2022 - present

 $Quantitative\ Research\ Executive$

Kolkata

Designing an Intraday Trading strategy for NIFTY 50 Futures

- Implemented deep learning (RNN, LSTM) and machine learning models to predict price movements in NIFTY 50 near Futures contract, achieving real-time directional accuracy of 83%.
- Devised a trading strategy on minute and second level data to identify precise entry and exit points, achieving an average success ratio of 63% and return after cost of 107% on a yearly rolling basis.
- Developed a volatility-based risk management framework, effectively limiting maximum drawdown to 8.4%.
- Conducted **option chain analysis**, using open interest to identify accurate reversal price points from support and resistance levels.

Designing an Investment model for ADANIPORTS and ASIANPAINT stocks

- Designed a classification model leveraging OHLCV data and macroeconomic factors to find precise entry points, integrated with a robust risk management framework, beating the benchmark returns 87% of the time.
- Performed comprehensive fundamental analysis to estimate the fair value of stocks using absolute and relative valuation methodologies.
- Strategically implemented **hedging through options** against long equity positions, optimizing **strike price selection dynamically** to mitigate downside risk and reduce the impact of adverse overnight price movements.

Dr. Reddy's Laboratories

Jan, 2022 – Jul, 2022

Data Science Intern

Hyderabad

- Demand Forecasting for pharmaceutical supply chain using traditional time series techniques (ARIMA, SARIMA, VAR) and different machine learning approaches.
- Establishing causal relationships between different stages of the supply chain using statistical methods (Granger causality, cointegration test), enabling strategic decision-making to improve operational efficiency and market share of the company.

Personal Projects

Survival Analysis of patients with recurrent bladder cancer

Nov, 2021 - Jan, 2022

- Conducted survival analysis on bladder cancer patients using Kaplan-Meier and Cox Proportional Hazard models.
- Implemented Shared Frailty models to handle recurrent events, hence identifying treatment effectiveness.

Pneumonia Prediction from Chest X-ray Images

Apr, 2021 – Jun, 2021

- Trained a CNN model for classification of chest X-ray images, thereafter implemented Transfer learning using ResNet50 backbone.
- Improved **neural network interpretability** by implementing **visual saliency maps** using a pre-trained VGG-16 model, visualizing image regions that significantly influence model decisions.

Certifications

• SEBI certified NISM-Series-XV : Research Analyst.

Technical Skills & Interests

Languages: Python, R, SQL

Libraries: NumPy, Pandas, Scikit-Learn, TensorFlow, Keras, PyTorch, SQLAlchemy, Matplotlib

Area of Interest: Statistics, Machine Learning, Deep Learning, Computer Vision, Equity Markets, Derivatives

Relevant Courses

Linear Algebra	Machine Learning	Deep Learning
Computer Vision	Time Series Analysis	Survival Analysis
Optimization Algorithms	Probabilty and Distribution Theory	Statistical Inference

Education

Year	Degree	Institution	Performance
2020- 2022	M.Sc. Big Data Analytics	Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI)	CGPA: 8.72
2017- 2020	B.Sc. Mathematics (Honours)	St. Xavier's College (Autonomous), Kolkata	CGPA: 7.32
2015- 2017	Higher Secondary, WBCHSE	South Point High School, Kolkata	90 %