ANMAYA AGARWAL

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PROFESSIONAL EXPERIENCE

2023 Piramal Capital and Housing Finance Ltd.

Mumbai / India

(2 Months)

Data Analyst Intern

- Forecasted the prices of 7 sectoral indices (NIFTY Auto, FMCG, Pharma, Financial Services, IT, Consumer Durables, Bank) using Macroeconomic and Sector-Specific Factors.
- Conducted Feature Engineering, Granger Causality, and Time Series Analysis for each sector.
- Built a regression model with adjusted R Square in the range of 84% to 96% for all sectors.

2023 **Bonanza Portfolio Ltd.**

Mumbai / India

(2 Months)

Equity Research Analyst Intern

- Crafted a financial model on Tata Motors Ltd. using Discounted Cash Flow (DCF) valuation method seeing an upside of 15%.
- Back tested a proprietary software and suggested 15+ bug fixes and UI changes.

2022 Hurix Digital

Remote / India

(3 Months)

Angular Developer

- Developed the SaaS product Kitaboo using Angular and related languages.
- Designed front-end, integrated back-end APIs, and implemented web app functionalities.
- Received Star of the Month in a dept. with 40+ people, extension of tenure to July (accepted) and PPO offer.

EDUCATION

2019 - 2024

NMIMS University, MBA (Master's in Business Administration)

GPA - 3.85 / 4.00

Major in Technology Management with a specialisation in Finance

Minor in Business Analytics

Co-authored a book chapter titled "Evolution of Capital Asset Pricing Model (CAPM)" in "Technology, Business and Management in Dynamic Era" (ISBN - 978-93-91044-51-0) <u>Link</u>

- Evaluated accuracy of CAPM return based on forecasted data (Ex-Ante) against the traditional method which is based on historical data (Ex-Post) for a sample of 30 stocks.
- For 20 out of the 30 sampled stocks, the Ex-Ante CAPM exhibited, on average, a greater accuracy in estimating the required rate of return compared to the Ex-Post CAPM by 5.78%.

2019 - 2024

NMIMS University, B. Tech. (Bachelor of Technology)

GPA - 3.85 / 4.00

Major in Computer Engineering

Final Year Project - Suspicious Fishing Activity Detection using Machine Learning

- Performed data analysis and feature engineering using Python, Excel, and Tableau to create a novel labelled dataset with more than 50,000 samples of AIS disabling events.
- Achieved a testing recall of 80% by implementing several Machine Learning Algorithms.
- Review paper accepted by the International Conference on Intelligent Computing and Networking.
- Research paper currently in the pre-print stage. **DOI Link**

SKILLS

- Python –
- NumPy, Pandas, StatsModels, Matplotlib, Plotly
- Scikit-learn, XGBoost, SMOTE, Undersampling
- Data visualisation Excel and Tableau
- Web Development HTML, CSS, JavaScript, Angular
- Time Series ARIMA, FB Prophet, VAR

PROJECTS

2023 Portfolio Allocation

- Developed a Python program that uses constrained linear programming to determine the most efficient portfolio allocation based on various financial models Markowitz Efficiency Frontier, Sharpe's Optimal Portfolio, CAPM and Arbitrage Pricing Theory.
- Utilised Sharpe's Ratio, Treynor Ratio and Jensen's Alpha to find the optimal portfolio.

2023 Options Strategy Builder

• Automated the task of options strategy building using Python - data extraction of option chain from NSE using web scraping, payoff chart and final P&L, based on option strike prices and maturities as inputs.

2019 IIT Gandhinagar, Centre for Creative Learning

• Designed and created MDF-based 3-D Puzzles in AutoCAD for distribution to schools in Gujarat, fostering creative learning.

EXTRA-CURRICULAR & CERTIFICATIONS

Certifications

- National Institute of Securities Markets (NISM) Series XV Research Analyst
- National Institute of Securities Markets (NISM) Series VIII Equity Derivatives.
- Rank 14 globally in the SAS Curiosity Cup which had participants from 16 different countries.

Extra-Curricular

- Co-Founded the CodeChef Committee for Competitive Programming at NMIMS University.
- President of the Computer Society and Editor-in-Chief of the Film Making society at Mayo College, Ajmer.

Sports

• Squash - Participated in National, State, and Inter Public School Conference squash tournaments.

Languages • Hindi (Mother Tongue), English (Bilingual), French (Intermediate)