Prakhyath Shivappa

532 Hudson Street, Hoboken, NJ 07030

551-344-5968 | prakhyathshivappa@gmail.com | linkedin.com/in/prakhyath-shivappa | github.com/PrakhyathS

Education

Stevens Institute of Technology — **September 2022 – May 2024**
Masters of Science in Financial Engineering (GPA: 3.9/4.0) — *Hoboken, NJ*

PESIT — **June 2015 – June 2019**
Bachelor of Engineering in Mechanical Engineering — *Bengaluru, India*

Experience

Stevens Institute of Technology — **January 2023 – May 2023**
Teaching Assistant — Course: Bloomberg and Thomson Reuters — *Hoboken, NJ*

- Guided a class of 20 students in mastering Bloomberg tools for financial data analysis, data extraction, and market research through hands-on tutorials and personalized assistance.

Ebullient Securities Pvt — **July 2021 – June 2022**
Quantitative Research Analyst — *Gurugram, India*

- Partnered with algorithmic strategy teams and vendor data handlers to develop a robust in-house algorithmic trading system, enhancing trading efficiency and accuracy.
- Oversaw a diversified portfolio worth USD 1.5 million, comprising stocks, derivatives, and ETFs, and implemented risk management strategies that minimized losses and maximized returns.
- Supervised and mentored 4 interns, enhancing their skills in extracting and analyzing financial market data from global reports using SQL, resulting in a 20% improvement in data accuracy.

Vasanth Securities Ltd — **July 2019 – June 2021**
Associate Trader — *Delhi, India*

- Executed quantitative and numerical analyses to design a robust risk management system employing delta-neutral strategies, achieving an average monthly profit of USD 15,000.
- Applied data-driven analysis to formulate strategies for commodities, attaining a hit rate of 40% and a risk-to-reward ratio exceeding 1:2.5, which led to a 10% increase in net profit and a 5% increase in trading volume for the firm.

Projects

Bank of America - QWIM Research | *Python, CVXPY, SciPy* — **February 2024 – May 2024**

- Engineered and assessed three advanced portfolio construction models using network analysis, negative skewness, and machine learning techniques, improving investment decision-making processes.
- Optimized portfolio performance, significantly boosting key metrics in portfolio management such as risk-adjusted return, diversification, and dynamic asset allocation.
- Achieved annualized returns of 10.78% for machine learning, 9.34% for negative skewness, and 6.07% for network analysis, markedly exceeding the minimum variance benchmark of 4.67%.

Realized Volatility Prediction | *Python, scikit-learn, Kaggle, glob, joblib, Order book* — **March 2023 – April 2023**

- Crafted predictive models for short-term stock volatility, delivering insights into expected price fluctuations over 10-minute periods, and achieved an RMSPE of 0.341 across diverse sectors during evaluation.
- Utilized advanced statistical and machine learning techniques, integrating features like price trends, trading volume, and market indicators, to provide crucial insights for pricing options and other financial products.

Nasdaq Closing Price Prediction Challenge | *Python, Optuna, Optiver* — **September 2023 – December 2023**

- Directed a team of 4 in creating a model to predict closing price movements for Nasdaq-listed stocks in the final ten minutes of trading, employing order book and closing auction data to derive insights, and achieved a public score of 5.47.

Technical Skills

Languages: Python, Java, C, C++, R, HTML/CSS, JavaScript, SQL, VBA, Easy Language
Developer Tools: VS Code, Eclipse, Google Cloud Platform, Android Studio
Technologies/Frameworks: Linux, Jenkins, GitHub, JUnit, WordPress
Certification: Bloomberg, Executive Programme in Algorithmic Trading (EPAT)

Leadership

Stevens Institute of Technology — **September 2023 – May 2024**
Peer Mentor — *Hoboken, NJ*

- Guided a team of 5 students, steering their goals and resolving challenges they faced.
- Coordinated inclusive events with 30+ participants, prioritizing comfort and inclusivity, fostering a welcoming and diverse community atmosphere that improved student engagement and satisfaction.