PRABHAV KUMAR
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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY — Cambridge, MA
Candidate for Master of Finance, February 2026 — 2024 - Present

- Grade: 5.0/5.0
- Honors: ASEAN Fellowship (for an outstanding academic record, personal achievements and professional promise)
- Anticipated Coursework: Advanced Mathematical Methods for Financial Engineering, Options and Futures Markets, Fixed Income Securities and Derivatives, Applied Macro- and International Economics, Financial Data Science and Computing, Optimization Methods (PhD), Econometrics (PhD), Time Series Analysis (PhD)
- Clubs: Quantitative Financial Markets, Sloan Runners, Southeast Asia, South Asia Business

NATIONAL UNIVERSITY OF SINGAPORE — Singapore
Bachelor of Science in Mathematics, June 2024 — 2020 - 2024

- Grade: Honours (Highest Distinction); Minors in Computer Science and Statistics
- Thesis: Pricing Catastrophe Bonds; Shortlisted for 2024 Outstanding Undergraduate Researcher Prize (Top 0.2%)
- Relevant Coursework: Abstract / Linear Algebra, Multivariable Calculus, O / PDEs, Real / Complex Analysis, Probability & Statistics, Stochastic Processes, Regression Analysis, Data Structures & Algorithms, OOP, Machine Learning
- Clubs: Investment, Calisthenics

EXPERIENCE

BANK OF AMERICA — Bangkok, Thailand
Global Markets Summer Analyst, FICC Trading — Summer 2023

- Developed a statistical model to forecast ThaiGB yields with a prediction accuracy of 68% by performing stepwise regression on key macroeconomic factors (adopted by Thai traders for post-data release analysis)
- Led a team of 4 interns across Asia to present THB IRS and USDTHB trades to senior traders based on curve analysis, Bank of Thailand policy commentary, and tourism sector research (client executed one trade)

ASTIGNES CAPITAL — Singapore
Global Macro Hedge Fund spun out of Alphadyne Asset Management ($3B AUM)
Quantitative Risk Intern, Quantitative Crypto Strats — May 2022 – Nov 2022

- Constructed a digital asset Streamlit dashboard using pandas, BeautifulSoup, and a CoinGecko API for data collection and processing, providing crypto traders with real-time market tracking, daily statistical analysis, and news insights
- Increased Sharpe ratio by 0.15 of a trading strategy by implementing filters based on structural entropy and Hurst exponent analysis and devised a cointegration-based pairs trading strategy to optimize asset selection

Quantitative Developer Intern, Regime Modeling — Summer 2021

- Automated FX option implied volatility data collection for illiquid currency pairs using a Python-based Bloomberg API and a triangulation method, streamlining a process traders previously calculated manually
- Created eigenvalue-based market risk indicator by applying Principal Component Analysis (presented to Investment Committee and utilized by Portfolio Managers to enhance risk management when deciding on risk-on/off asset allocations)
- Implemented a Markov Model to detect regime shifts in financial markets, forming a systematic trading strategy with a Sharpe Ratio of 1.2

GREENLAND INVESTMENT MANAGEMENT — Mumbai, India
India's Largest Systematic Commodity Manager ($1.5B AUM)
Quantitative Researcher Intern, Commodity Arbitrage — Summer 2019

- Developed arbitrage trading strategies for agricultural and chemical commodities through comprehensive analysis of 10+ industry reports and research papers
- Formulated mean-reversion spreads by calculating production costs, resulting in two strategies currently deployed in Greenland Global Fund II (2+ Sharpe ratio)

ADDITIONAL INFORMATION

- Technical Skills: Python (Advanced), Java (Intermediate), R (Intermediate), Bloomberg, LaTeX
- Math Competitions: 2018 British Mathematical Olympiad (Distinction), 2018 South East Asia Mathematics Competition (Top 10), 2018 World Mathematics Championships (Bronze), IB Diploma Programme: 52/52 points (Top 0.0004%)
- Interests: Basketball, Cricket, Formula 1, Manchester United, Reading, Running