ARYAMAN NAGPAL

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EDUCATION

New York University, College of Arts and Sciences, New York, NY — May 2026
B.A., Double Major in Economics & Mathematics (Honors), and Computer Science; GPA: 3.883
Dean's List: 2022-23, 2023-24, 2024-25
Organizations: Society for Industrial and Applied Mathematics (Member), Stern Investment Analysis Group (Member)
Relevant Coursework: Advanced Macroeconomics • Econometrics • Honors Analysis I • Honors Theory of Probability • Honors Ordinary Differential Equations • Honors Linear Algebra • Numerical Computing • Computer Systems Organization • Algorithms

RELEVANT EXPERIENCE

Research Analyst Intern, **OmniScience Capital** — Jun 2023 – Aug 2023 • Jun 2024 – Aug 2024
- Developed a Python-based smart beta portfolio system using CRSP/Compustat data for low-frequency alpha generation
- Pioneered the first index tracking large cap chemical companies in India (NSE) by designing a backtesting model in Excel
- Conducted in-depth market research for investment idea generation in emerging technological industries
- Executed CAPM modeling for detailed portfolio analysis and employed risk metrics (Beta, VaR, cVaR) for benchmarking

Quantitative Trading Analyst, **NYU Mathematical Finance Group** — Feb 2024 – Present
- Developing pricing models for vanilla securities, interest-rate derivatives, and exotics (range, digital, and Asian options)
- Gaining experience in developing quantitative algorithms for trading derivatives, currencies, and commodities

Quantitative Research Intern, **New England Investment Consulting Group** — Jan 2024 – May 2024
- Spearheaded the proposal, refinement, and backtesting of a cointegrated U.S. large cap equity pairs trading strategy
- Implemented Python scientific stack (numPy, pandas, statsmodels, scikit-learn) to develop and optimize quantitative models
- Designed an original indicator with RSI, optimizing trade timing for improved risk-adjusted performance (1.462 Sharpe)

Structured Credit Portfolio Intern, **Astra Management** — May 2021 – Oct 2021
- Delivered 3 ad-hoc research reports, providing insights on the impact of COVID-19 on distressed fixed-income assets
- Performed extensive historical analysis of past crises to formulate strategic recommendations for Additional Tier 1 bonds

LEADERSHIP EXPERIENCE

Undergraduate Course Assistant, **NYU Courant Institute of Mathematical Sciences** — Sep 2024 – Present
- Grading weekly homework assignments and exams for MATH-UA 122 Calculus II & MATH-UA 120 Discrete Math

Online Instructor, **The Princeton Review** — Sep 2023 – Feb 2025
- Instructing classes of 20-25 high school students in AP Calculus AB/BC and Digital SAT

Captain, **Varsity Cross Country, Singapore American School** — Aug 2021 – May 2022
- Achieved team gold in the Interscholastic Association of South-East Asian Schools (IASAS) competition in Manila

HONORS AND AWARDS

Cubist Systematic Strategies Hackathon Team Gold, *Point72* — Apr 2024
- Developed a CLI in Python that formulates real-time tradeable contracts for MTA subway train timings ($10k prize)

National Merit Scholar, *United States National Merit Scholarship Corporation* — Feb 2022
Summa Cum Laude (GPA: 4.54/4), *Singapore American School* — May 2022
1600 SAT (Perfect Score), *College Board* — Aug 2021

CERTIFICATIONS AND SKILLS

Term-Structure and Credit Derivatives • Optimization Methods in Asset Management, *Columbia University* — Aug 2023
Python for Data Science, AI & Development, *IBM* — Jun 2023
Bloomberg Market Concepts • Bloomberg Environmental Social Governance — Jun 2023

Computer: Python, C, C++, Java, MATLAB, SQL, R, Microsoft Excel, Bloomberg Terminal
Languages: English (Native), Spanish (Working proficiency), Hindi & Marathi (Elementary proficiency)