

# 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: 3.854

Dean's List: 2022-23, 2023-24

*Organizations:* Society for Industrial and Applied Mathematics (Member), Stern Investment Analysis Group (Member)

*Relevant Coursework:* Microeconomic Analysis • Advanced Macroeconomics • Econometrics • Honors Analysis I

Honors Calculus III • Honors Linear Algebra • Data Structures • 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 examinations for MATH-UA 122 Calculus II

*Online Instructor, The Princeton Review*

Sep 2023 – Present

- 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:** Java, Python, C, SQL, R, Microsoft Excel, Bloomberg Terminal

**Languages:** English (Native), Spanish (Working proficiency), Hindi & Marathi (Elementary proficiency)