

# Andrew Yuan

New York, NY | [aycooper2022@gmail.com](mailto:aycooper2022@gmail.com) | [My Website](#) | [Github](#)

## Education

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**The Cooper Union for the Advancement of Science and Art**, New York, NY Expected Graduation May 2026  
*Bachelor of Engineering* in Electrical Engineering

- Double Minor in Mathematics and Computer Science
- GPA: 3.9/4.0 | Major GPA: 4.0/4.0 | Minor GPAs: 4.0/4.0
- **Awards and Honors:** Tau Beta Pi | Eta Kappa Nu | Jesse Sherman EE'33 Book Award – EE'26 Class Rank 1  
Dean's List (All Semesters) | Half-Tuition Scholarship (2022-2025) | Full-Tuition Scholarship (2025-2026) |  
Innovator's Award Scholarship
- **Relevant Coursework:** Linear Algebra, Probability Models and Stochastic Processes, Convex Optimization  
Techniques, Discrete Mathematics, Abstract Algebra, Differential Equations, Software Engineering & Large  
Systems Design, Data Structures & Algorithms I-II, Signals Processing, Finance

## Technical Skills

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**Computer Languages:** C, C++, Python, Java, SQL, MATLAB

**Tools:** Git, NumPy, SciPy, pandas, Springboot, JUnit, Docker, PostgreSQL, LTspice, Microsoft Office,  $\LaTeX$

## Experience

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**CAMP REU Research Intern**, Cal Poly Pomona – Pomona, CA Summer 2025

- Studied kernel methods for Gaussian Processes and Support Vector Machines under Mentor Dr. Jimmy Risk
- Designed and optimized kernel functions in Python and R for use in applications such as time series, image processing, and financial data

**Mathematics Tutor**, The Cooper Union – New York, NY Fall 2024 – Present

- Provide drop-in assistance and individual tutoring for 5+ students in: Calculus I-III, Linear Algebra, Probability, and Differential Equations

**Mathematics Grader**, The Cooper Union – New York, NY Fall 2024 - Present

- Evaluate and provide feedback on assignments for 50+ students in Calculus I-II and Intro to Linear Algebra courses

## Projects

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**CooperWall – Cooper Union Quote Forum**, *ECE-366 Software Eng. Final Project* Spring 2025

- Collaborated with a three-member team to design and implement an interactive quote-sharing web application for the Cooper Union using a full-stack architecture
- Developed backend in Java using Spring Boot framework with PostgreSQL for persistent storage and Docker for containerized deployment.

**Portfolio Optimization and Risk Analysis** Fall 2024

- Applied Modern Portfolio Theory using Python, NumPy, and Pandas to construct Minimum Variance and Market Portfolios, optimizing risk-adjusted return from processed S&P 500 data via yfinance
- Computed and analyzed daily/excess returns, risk-free rates, and random portfolio weight distributions to evaluate performance, visualize efficient frontiers, and assess risk-return trade-offs

## Extracurriculars

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**International Finance Student Association Student Chapter**, *Secretary* Fall 2024 - Present

- Co-founded the first North American chapter of International Finance Student Association at Cooper Union, growing membership to 25+ active participants, surpassing the average club size of 10
- Coordinated numerous events and outreach with a budget of \$800 to ensure successful execution and financial sustainability over the course of the semester

**US National Badminton Player** 2012 - Present

- US Junior National Champion, Pan American Junior Champion, and US Adult National Finalist
- 5x US Junior National Team, 2025 FISU World University Games and 2022 World Junior Championships Team