

# Matthew Adner

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## Education

**Union College** – Schenectady, NY Class of 2026

Bachelor of Science in Math and Economics  
Minor in Computer Science

**Honors:** Presidential Scholarship Recipient

**Relevant Courses:** Natural Language Processing [Python], Probability Theory, Econometrics [Stata], Data Visualization [Tableau], Financial Analysis [Excel], Seminar in Forecasting [R], Data Structures and Algorithms [Java], Logic and Set Theory [LaTeX], Discrete Math, Linear Algebra

## Competencies

- Python, R, SQL, Java, HTML, CSS, JavaScript
- Excel, Tableau
- Machine Learning, NLP, Data Visualization
- Fusion 360, Soldering
- Probability, Statistics
- Communication, Technical Writing

## Data and Quantitative Experience

**Quantitative Trading Strategies, Group Founder: Student Investment Fund** – Schenectady, NY September 2022 – Present

- Develop trading algorithm trained on over 16 million datapoints, conduct backtesting, trading analysis, portfolio optimization.
- Co-manage over 1 million dollars of the Union College endowment in a long only equity/fixed income portfolio.
- Produce visualizations to communicate portfolio performance, allocation, and market correlation.
- Explain technical processes and systems to an audience of technical and non-technical students and professors.

**Research Assistant: Tuck School of Business at Dartmouth College** – Hanover, NH June 2023 – Present

- Analyze large sets of real estate price data to identify trends and patterns. Working with Professor Brian Melzer.
- Translate successful equity trading strategies to regional real estate markets and backtest their effectiveness.
- Develop code in R and Python to synthesize data analysis into clear visualizations and dashboards.

**Assistant Scientist and Mentor: New Hampshire Academy of Science Summer Program** – Lyme, NH Summer 2022, 2023

- Taught modules on computer science, machine learning, computer vision, 3D modeling, and Arduino, for ages 13-18.
- Advised experimental design, execution, and analysis. Directed social media and outreach efforts.

**Summer@INSEAD: INSEAD Business School** – Fontainebleau, France July 2022 – August 2022

- Learned about business strategy, management, and operation. Developed skills in negotiation, teamwork, and decision making.

**Consumer Review Data Analysis: Independent Project** – Hanover, NH June 2021 – September 2021

- Cleaned and processed over 400,000 textual and numerical reviews of Amazon products for over 50 unique companies.
- Identified statistically significant star rating bias given to smaller companies using sentiment analysis and machine learning.

## Work Experience

**Beuth House Procurement Chair: Union College** – Schenectady, NY March 2023 – November 2024

- Identified and procured resources for events, negotiated contracts with local businesses, collaborated with faculty.

**Ski Instructor: Dartmouth Skiway Snowsports School** – Lyme, NH Winter 2018 – 2023

- Led beginner and intermediate ski lessons for individuals and groups of all ages. PSIA Alpine Ski Level 1 Certified.

**Computer Science Teaching Assistant: Hanover High School** – Hanover, NH September 2021 – June 2022

- Developed software for student interaction measurement, presented lectures, worked with students, graded assignments.

**Student Researcher: New Hampshire Academy of Science** – Lyme, NH July – September 2018 – 2021

- Delegate to AJAS conference, AAAS affiliated. Published research abstracts, presented in poster session and roundtable.
- Researched object detection [machine learning applications](#). Developed spectrometry techniques for [plant stress detection](#).

**Founder & President of Plant Club: Hanover High School** – Hanover, NH September 2021 – June 2022

**Elected Swim Team Captain: Hanover High School** – Hanover, NH December 2022 – March 2022

**Associate Member: Sigma Xi Scientific Research National Honor Society** Winter 2020 – Present

**Interests:** Skiing, Cycling, Yoga, Running, Coffee, Cooking