

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