

Jesse Schmolze

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Education

University of Wisconsin, Madison

B.S. in Economics, Mathematics and Physics

GPA: 3.91/4.00

Relevant Coursework: Stochastic Processes, Probability Theory, Econometrics, Machine Learning, Deep Learning, Linear Algebra, Multivariable Calculus, Intermediate Microeconomics, Intermediate Macroeconomics, International Macroeconomics, Money and Banking

Madison, Wisconsin

Graduation May 2027

Quantitative Analysis Experience

Federal Reserve Challenge Club

Head of Communications & Financial Markets Senior Resarcher

Madison, Wisconsin

Apr 2025 - Present

- Led a team of 10 that researched how monetary policy changes impacted fixed income assets, currency markets and financial market stability by using 20+ indicators that span from credit spreads to delinquency rates.
- Combined our findings with macroeconomic indicators and financial conditions to develop fiscal and monetary policy recommendations that I will present to the Federal Reserve in October.
- Created open lines of communication between our club's 7 different sub-teams, which improved efficiency and accelerated our timeline by 11 days relative to expectations.

Quantum Physics & Equity Market Inefficiencies

Independent Research(Ongoing)

Madison, Wisconsin

May 2025 - Present

- Developed a stochastic model in Python by using similarities between quantum particle transmission probabilities and random equity price movements to find inefficiencies in equity valuations.
- Leveraged financial statements, accounting metrics, market indicators and the mathematical theory of quantum physics to find equities with asymmetric risk probabilities.
- Designing backtests across hundreds of equities to evaluate model signal strength and performance potential relative to the S&P 500.

Badger Solar Racing Club

Race Strategy Team Lead

Madison, Wisconsin

Apr 2025 - Present

- Collaborated with engineers to learn the dynamics of solar powered cars and translated my understanding into a Simulink model of our car's performance.
- Developed and solved a system of partial differential equations in MATLAB to model constraints such as air resistance and track conditions, enabling optimized race strategies that improved performance by approximately 10.7%.
- Developed Monte Carlo simulations that aimed to stress-test our system against a wide variety of terrains, weather patterns and race conditions to improve model reliability.

Work & Leadership Experience

Undergraduate Business Law Association

Founder & President

Madison, Wisconsin

Mar 2025 - Present

- Founded UW-Madison's first undergraduate business law club, which gives 14 members the opportunity to explore the intersection between business and law at an applied level.
- Designed a 13-week curriculum enabling members to debate the legal and ethical implications of financial sector activity across banking, real estate, private equity, and more.
- Spearheaded the merger of UW-Madison's and UCLA's analogous organization to form a nationwide network that expands our reach and gives member's access to more professional development events.

Everlight Solar

Business Value Creation Intern

Brooklyn Center, Minnesota

Summer 2025

- Six week internship where I applied iterative client engagement strategies to convert cold leads into warm appointments that generated over \$80,000 in revenue.
- Accelerated residential market customer engagement by refining and delivering solar value propositions to 500+ households.
- Developed conversational frameworks to overcome common objections and align with client's needs that led to 50+ personalized solar consultations.

Skills & Interests

Programming: Java, Python(NumPy, PyTorch, Pandas), Simulink, MATLAB, Stata, Microsoft Office Suite

Interests: Chess, 19th Century Russian Literature, Minnesota Timberwolves, Conscious Hip-hop, Collecting Jordans