

Justin Tarquino

Chicago & Las Vegas | jtarquino@uchicago.edu | 702-768-6918 | www.linkedin.com/in/justin-tarquino

EDUCATION

University of Chicago

B.S. in Computational and Applied Mathematics & B.A. in Statistics

GPA: 3.80/4.00 | Relevant Coursework: Real Analysis I - III, Introduction to Mathematical Probability, Introduction to Computer Science I - II, Abstract Linear Algebra, Financial Accounting, Introduction to Data Science, Basic Numerical Analysis

St. Paul's School

Diploma

GPA: 3.66/4.00 (Unweighted) | Awards: Dickey Prize in Math (2020), Cum Laude Society Member, Finalist for 2020 Ferguson Scholarship (St. Paul's most distinguished scholastic prize), Honor Roll 2019-2021

PROFESSIONAL EXPERIENCE

University of Chicago Booth School of Business

Researcher

- Conduct novel investigations into trading strategies using modern techniques as part of Professor Dacheng Xiu's research team
- Explore the application of nonlinear autoencoders, a type of neural network, to the analysis of financial data using PyTorch
- Compare methods with the non-linear single-factor asset pricing model by recreating results generated from existing findings

University of Chicago Math Department

Junior Tutor

- Assist in teaching forty University of Chicago students calculus topics such as integration, differentiation, limits, and series
- Evaluate and grade homework, ensuring an improved understanding of the coursework through meaningful corrections
- Collaborate with the class professor to improve students' understanding of the material through one-on-one help

Math Research Experiences for Undergraduates

Apprentice Researcher

- Authored and published a 20-page introductory [paper](#) on Fourier Series and Transforms, emphasizing the field's application to denoising physical signals using a digital process called the Discrete Fourier Transform
- Developed independent research skills with the ultimate purpose of applying theoretical knowledge to practical applications
- Engaged in daily professor-led lectures and problem-solving sessions on group theory, number theory, and graph theory

Camp Solomon Schecter

Head Staff, Counselor, Challenge Course Staff

- Oversaw the individual efforts of over 50 counselors in satisfying the emotional and personal needs of over 300 campers, boys and girls aged between 7 and 15 years old over the course of three weeks at a summer sleepaway camp
- Demonstrated flexibility and quick yet rational decision-making in responding to challenging and erratic camper behavior
- Enhanced teamwork abilities by embracing necessary collaboration and communication with the Camper Care team

LEADERSHIP & ACTIVITIES

University of Chicago Trading Competition

1st Place Winner

- Led my team to first place out of 36 selected teams from colleges around the country in a portfolio allocation challenge
- Maximized the Sharpe ratio of our winning strategy by implementing a Markowitz portfolio weighting algorithm and then optimizing the lookback period for the data in which we trained our weights on
- Coded a trading bot using custom API for a live market-making simulation whose primary strategy was ETF swap arbitrage

Paragon Global Investments

Quantitative Track Analyst

- Studied algorithmic trading strategies (i.e. time-series momentum), portfolio management, options theory, investment theory
- Employed Python, statistics, data analysis, and portfolio theory to research and test advanced trading strategies
- Improved intuition for competitive strategies through club competitions such as Blotto and Estimathon

Financial Markets Career Program

Member

- Selective career program for quantitative finance that facilitates industry exposure through site visits and guest lecturers
- Practiced technical and behavioral questions in preparation for interviews for quantitative finance internships

SEO Career

SEO Edge, Markets—Sales and Trading Track

- Receive coaching and online instruction to achieve targeted interview, technical, and professional goals
- Learn business fundamentals to compete successfully for internship opportunities

SKILLS

Computer: Python, NumPy, Pandas, PyTorch, HuggingFace, Scikit-learn, SciPy, LaTeX, Visual Studios Code, Microsoft Office

Languages: English(Native), Spanish(Advanced), Hebrew(Beginner)

Interests: Rock climbing, jigsaw puzzles, cooking, techno music, photography, "Interstellar" by Christopher Nolan