Lucas Tucker
lwtucker@uchicago.edu | 510-666-5233 | 1480 Moraga Rd, Moraga CA |Website: https://lucas-tucker.github.io/

EDUCATION

The University of Chicago Chicago, IL
GPA: 3.90/4.00
Bachelor of Science in Math Expected, June 2025
Bachelor of Science in Computer Science Expected, June 2025

Classes: Honors Analysis, Deep Learning, Systems, Machine Learning, Honors Graph Theory, Honors Algorithms
Awards: 3rd place at the 2024 UChicago Trading Competition, 1st place in Citadel x UChicago Auction Challenge

EXPERIENCE

Adobe Inc., San Jose, CA June 2024 – September 2024
Software Engineering Intern
- Built an LLM pipeline end-to-end that converts Jenkins and CircleCI pipelines to GitHub Actions Workflows
- Added functionality to also automate migration to GitHub Enterprise Cloud
- Further added a tool to return a markdown-formatted snapshot table of observability metrics based on retrieved logs

University of Chicago, Chicago, IL June 2023 – August 2023
Student Researcher
- Studied statistical learning theory under PhD mentor as part of highly selective University of Chicago REU
- Published paper and code presenting improvements to dimensionality reduction algorithms

Actelligent Capital, Remote (Hong Kong, China) December 2021 – September 2022
Quantitative Research Intern
- Worked on natural language processing team to extract useful features from financial statements, news, and tweets
- Utilized PyTorch for model training and Pandas and scikit-learn for supplementary data analysis

LEADERSHIP & ACTIVITIES

Paragon National Group, Chicago, IL March 2022 – present
Principal Quantitative Developer
- Leading the development of the first ever undergraduate-run fully-systematic trading fund
- Implemented mean-reversion and factor analysis-based trading algorithms and backtested on CloudQuant data

Department of Mathematics Directed Reading Program, Chicago, IL September 2022 – January 2023
Mentee
- Studied analytic number theory (Eisenstein Series) under a PhD student and presented work at DRP Seminar to graduate students and professors

PROJECTS

Dimensionality Reduction Paper
- Published paper & python-based experiments to improve runtime of PCA on large-scale data and Laplacian Eigenmaps on data with introduced sampling bias

Fisher Markets with Leontief and Linear Utilities
- Analyzed Nash equilibria in Fisher Market Games and explored a convex program (Eisenberg-Gale) for finding them

Large Checkers Engine
- Built a mini-max checkers engine for Large Checkers (board is arbitrary size)

SKILLS

Computer: Python, C, C++, Swift, Java, React, NumPy, Pandas, PyTorch, scikit-learn, Gephi, Excel