Louis Otto

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EDUCATION

The University of Chicago **Chicago, IL**
Master of Science in Financial Mathematics *Expected: June 2025*

- Courses: Probability & Stochastic Processes, Option Pricing, Portfolio & Risk Management, Python, C++
- Honors: Maroon Scholar (merit-based scholarship)

The University of Chicago **Chicago, IL**
Bachelor of Arts in Economics, Minor in Astrophysics (GPA: 3.95/4.00) *June 2024*

- Courses: Applied Regression Analysis, Linear Algebra, App Development, Statistical Methods, Econometrics
- Honors: Summa Cum Laude (highest honors), Robert Maynard Hutchins Scholar (top 10%)

EXPERIENCE

Hoover Institution, Stanford University **Stanford, CA**
Summer Policy Bootcamp Participant *August 2024 – Present*

- Engage in intensive seminars on critical policy issues, including fiscal policy, regulation, and national security
- Developing fact-based policy toolkit from distinguished leaders, including former Secretary of State Condoleezza Rice, four-star General Jim Mattis, and monetary policy expert John Taylor

Loomis, Sayles & Company **Chicago, IL**
Quantitative Researcher – UChicago Project Lab *June 2024 – Present*

- Construct convolutional neural networks using Python to predict price and volume patterns in futures markets
- Validate data source suitability for algorithms and examine academic research to improve image classification

Booth School Of Business **Chicago, IL**
Summer Research Intern *June 2024 – Present*

- Collaborate closely with Professor Dacheng Xiu (Poets & Quants' Best 40-under-40 Business School Professor)
- Engage in asset pricing research focused on feature engineering and comparative backtesting of ML models

Numeraxial LLC **Chicago, IL**
Quantitative Researcher – UChicago Project Lab *March 2024 – June 2024*

- Formulated and coded new mathematical multi-factor model for prepayment rates of mortgage-backed securities
- Utilized 4 features using OLS regressions and K-Nearest Neighbors ML algorithm to predict prepayment rates
- Cleaned and analyzed 3 large-scale Fannie Mae and Freddie Mac datasets with Python's data science packages
- Led 3 client presentations to communicate team progress on predictive models and answer technical questions

Allianz Investment Management **Munich, Germany**
Global Private Debt Analysis Intern *June 2023 – August 2023*

- Examined loan cash flows with focus on commitments, rates, and termination options
- Produced detailed analyses of PIMCO real estate holdings and market research for NYC skyscraper restructuring
- Recognized as first intern in 4 years to receive monetary bonus due to exceptional performance

EXTRACURRICULAR

The Blue Chips Investment Club **Chicago, IL**
Special Situations & Portfolio Management Group Analyst *October 2021 – June 2024*

- Presented long-only investment pitches for $170,000 AUM premier student fund with ~6% acceptance rate
- Completed 9-week-long financial educational program in valuation, accounting, and value investing
- Applied modern portfolio theory to analyze and optimize club's portfolio using NumPy and Pandas packages

ADDITIONAL INFORMATION

Languages: German (native), French (elementary proficiency), Spanish (elementary proficiency)
Interests: Scuba diving (PADI-certified), astronautics, soccer (FC Bayern Munich), financial history, chess, traveling