Conner Rose

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EDUCATION

University of Michigan, *Ann Arbor, MI* — **Expected May 2026**
B.S.E. and M.S.E. in Computer Science, Completing Requirements for B.S. in Honors Mathematics — *GPA: 3.80/4.0*
- **CS Coursework**: Data Structures and Algorithms, Discrete Math, Machine Learning, Computer Organization, Computation Theory, Web Systems, Advanced Operating Systems, Formal Verification of Systems Software
- **Mathematics Coursework**: Calculus I-IV, Linear Algebra, Combinatorics and Graph Theory, Probability, Real Analysis, Graduate Probability Theory, Advanced Linear Algebra, Discrete State Stochastic Processes

EXPERIENCE

IMC Trading, *Chicago, IL* — **June – August 2025**
Incoming Software Engineering Intern

Bloomberg L.P., *New York, NY* — **June – August 2024**
Software Engineering Intern – Enterprise Data, Index Core Data
- Designed and implemented dependency resolution and automated testing tool using **Python**, used by team of **80 engineers**, reducing turnaround time when modifying bond formulas in distributed calculation engine
- Expanded testing coverage from single-field to end-to-end, identifying existing bugs in calculation pipeline, and preventing bugs from being introduced that would not have been identified previously, resulting in more robust system
- Designed and implemented formula modification user interface using **React**, allowing developers to modify bond dependency and calculation configuration files, validate their modifications, while monitoring downstream affects

Traders At Michigan, *Ann Arbor, MI* — **September 2023 – Present**
Head of Software Engineering
- Lead development of ETF trading game, played at UMich Trading Competition by ~100 competitors simultaneously
- Design and deliver advanced SWE curriculum to club members, supporting their SWE interview and career preparation

Bloomberg L.P., *New York, NY* — **May – August 2023**
CTO Office Intern – Compute Architecture and OSPO
- Designed automated access revocation system using **Python** and **LDAP**, deployed to **Docker**-containerized **Jenkins Pipeline**, ensuring appropriate removal of inactive accounts from Bloomberg's open-source GitHub repositories
- Developed GitHub crawler using **Python** to scan all projects contributed to by Bloomberg employees over 10 years, automating contribution cataloging and open-source license compliance verification, increasing audited projects by **3x**

PROJECTS

Zinger's (ETF Trading Game) — **March – July 2024**
C++20, TypeScript, React, Websockets, Multithreading
- Architected ETF Trading Game, utilizing **websocket**-based infrastructure, enabling real-time data and order matching
- Developed **multithreaded** matching engine in **C++**, capable of handling **4M orders** in < **3 seconds** across 4 assets
- Implemented backend server using μ**WebSockets** integrated with matching engine, capable of sub **0.1ms 99% latency**

Historical Landmark Image Classifier — **October – November 2023**
Python, PyTorch, Pandas, NumPy, Matplotlib, Computer Vision
- Designed and implemented **convolutional neural networks** for multiclass image classification of historical landmarks
- Researched **model architecture** and **data augmentation**, employing subsampling and noise generation to improve accuracy and mitigate overfitting while training model with 5 convolutional layers and **+2,000,000** parameters

COMPETITIONS

University of Michigan Collegiate Poker Tournament — **October 2024**
- Placed 4th of 108 students from universities across the country, securing $500 in prize money

IMC Prosperity 2, *Python* — **April 2024**
- Utilized ETF arbitrage, pairs trading, game theory simulations, and other strategies to place 53rd of 9,140 (**top 0.58%**)

TECHNICAL SKILLS

Languages: C++, Python, JavaScript/TypeScript, HTML/CSS, SQL, LaTeX
Tools: Linux, Git, Docker, Jenkins, Django, React, PostgreSQL, MongoDB, Pandas, NumPy, (Neo)Vim, Tmux