

SIMON YANG

[✉️ yangsim@umich.edu](mailto:yangsim@umich.edu) [\(256\) 468 1978](tel:(256)4681978) [LinkedIn](https://linkedin.com/in/yangsim) [GitHub](https://github.com/ihatemagic)

Education

University of Michigan, Ann Arbor

B.S. Computer Science, Math Minor

- William J. Branstrom Prize Recipient (Top 5% of Class)

Expected May 2023

GPA 3.83

Skills

Languages: C++, C, Lua, Python, SQL, MATLAB

Technologies: Git, MySQL, Linux, Bash, Vim

Coursework: Data Structures & Algorithms, Foundations of CS, Computer Organization, Multivariable & Vector Calculus, Linear Algebra, Statistics

Experience

Belvedere Trading

Incoming Software Engineering Intern

Chicago, IL

Jun 2022 – Aug 2022

Flux TTT Servers

Founder, Game Developer

A Garry's Mod (video game) community startup with custom-coded servers

- Design modular code framework library for accelerated development and cleaner maintenance
 - Cultivate client relationships by developing fun minigames, lootbox gambling, player trading in Lua
 - Enhance user experience by building anti-cheat system to automatically ban **900+** hackers
 - Optimize MySQL database and client/server networking by **~100x** through delta update implementation, **reducing crashes from malicious DoS attacks by 87%** and **increasing scalability**
- Supervise a team of 21 staff who moderate the servers and forums to elevate player experience
- Surged flagship server's global ranking to **#2 out of 1464** competing servers by popularity
- Grown business to **41,000 players** and **\$5,000/month in microtransaction sales** from store

Ann Arbor, MI

Jul 2020 – Present

Michigan Investment Group

VP Recruiting, Quant Project Lead

Ann Arbor, MI

Jan 2021 – Present

- Organize recruiting events, marketing campaigns, and interviews, **increasing applications by 49%**
- Revamp application process with executive board to **reduce recruiting bias** and ensure standardization
- Led Statistical Arbitrage team by designing interface, managing sprints, and performing code reviews

Twickenham Advisors

Wealth Management Intern

Huntsville, AL

Jul 2021 – Aug 2021

- Compiled & classified ~800 frontend transactions for importing into new software
- Drafted market reports and synthesized investment meetings with private equity wholesalers

Projects

Portfolio Risk

Built portfolio weight optimization model that maximized Sharpe ratio and trained neural networks to predict covariance matrix and stock price (Python)

Stock Market

Organized a fast orderbook that read input orders, simulated buys & sells, and calculated optimal entry & exit prices while tracking daily trader profits (C++)

Assembly Simulator

Created a program based on custom ISA that converted assembly language into machine code and simulated it with pipelining and caching (C)

SQL Emulator

Programmed a SQL emulator with index generation for faster querying (C++)