

SIMON YANG

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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, Intro Computer Organization, Multivariable & Vector Calculus, Linear Algebra

Experience

Belvedere Trading

Chicago, IL

Incoming Software Engineering Intern

Jun 2022 – Aug 2022

Flux TTT Servers

Ann Arbor, MI

Founder, Game Developer

Jul 2020 – Present

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
 - Build anti-cheat system through C++ and Lua to automatically ban **900+** cheaters and rulebreakers
 - Optimize MySQL database and client/server networking by **~100x** through delta update implementation, **reducing crashes from malicious DoS attacks** and **increasing scalability**
- Supervise a team of 21 staff who moderate the servers and forums to empower our player experience
- Grown business to **41,000 players** and **\$5,000/month in microtransaction sales** from [store](#)

Michigan Investment Group

Ann Arbor, MI

VP Recruiting, Quant Project Lead

Jan 2021 – Present

School's premier investment club intersecting quantitative finance and technology

- Organized recruiting events, wrote software & quant interview questions, and improved [website](#) SEO
- Revamped application process to **reduce recruiting bias** and **increase applications by 49%**
- Led Statistical Arbitrage team by designing interface, managing sprints, and performing code reviews

Twickenham Advisors

Huntsville, AL

Wealth Management Intern

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++)