

Cameron Kruger

Chicago, IL | Phone # upon request
E-mail available on website | <https://ckruger.xyz>

Systems software engineer with expertise in low-latency and distributed trading systems. Specialized in ultra-low-latency software and infrastructure, high-throughput networking, and PnL-critical market microstructure. Experience spans traditional finance HFT and Web3, with strong focus in Rust, Python, and Java in resource-constrained environments.

EDUCATION

Bachelor of Science (B.S.) - Computer Science May 2022

George Mason University, Fairfax, Virginia

- Honors: Magna cum laude (GPA: 3.82/4)

EXPERIENCE

Trading Software Engineer August 2022 – Current

IMC Trading, Chicago, IL

- Architected and improved **ultra-low-latency distributed trading systems** for ETF and Delta One strategies, with focus on message optimization and system modernization
- Built trading critical, fault-tolerant service discovery system using Apache ZooKeeper in Java, implementing a custom multicast pub/sub system that **reduced network overhead by >50%** and greatly improving wire-to-wire order time
- Developed concurrent **log parser in Rust** for performance-critical log analysis tooling, **achieving 8x process speedup** for diagnosing proprietary trading system issues
- **Automated operationally intensive intraday strategy** with outsized PnL impact on desk using Python; improving execution speed by ~%70 and **saving over 100kpm**

Software Engineer and Research Intern December 2021 – March 2022

Nethermind, Remote

- Worked closely with Nethermind and other partners in developing open-source software for the Ethereum ecosystem, including contributing to a Starknet L2 client written in Go
- Engineered real-time **security monitoring agents** for DeFi protocols in Typescript, including a **\$500MM DeFi platform**, implementing custom pattern matching algorithms for detecting suspicious on-chain transactions
- Contributed to open-source Python mempool analysis tools that identified **profitable MEV arbitrage opportunities** across multiple DEXs/lending protocols
- Studied cutting-edge research in the smart contract, MEV, and DeFi space

Software Engineer Internship May 2021 – August 2021

Walmart Global Tech, Bentonville, Arkansas/Remote

- Created a **concurrent API in Go** that performed data analysis and JSON processing, delivered to a user-friendly front end with the use of internal APIs and MongoDB
- Planned, developed, and shipped a production web application within 8 weeks

SKILLS

Languages: Rust, Go, Java 17+, async/concurrent Python, Bash, x86 architecture

Blockchain: EVM, Solidity, SVM, Anchor, Web3.js, websockets, RPCs, Alloy, Geth

Infrastructure: Baremetal Linux tuning, Bash, RF networking, multicast, FPGA integration

Technologies: MySQL, MongoDB, Flask, Apache ZooKeeper, Kafka, FIX protocol