Mike Rolish

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http://web.mit.edu/merolish/www/

Experience

Remote (Minnesota)

Lakeville, Minnesota, USA

Warlock Labs Software Engineer

July 2024 - January 2025

- Researched and worked on initial development of an MEV searcher for Ethereum mainnet.
- Miscellaneous crypto/DeFi research and minor projects.
- Rust targeting Ethereum (including some Solidity and Huff).

Monachil Capital Partners

Remote (Minnesota)

Senior Software Engineer

August 2023 - June 2024

- Developed and maintained data pipelines and analytics for a private credit fund.
- Python on Windows and Azure.

Geode Capital Management

Boston, MA

August 2022 - July 2023

Principal Software Engineer

- Worked with a small team for several months to build out a new data pipeline prototype.
- Kotlin, Kafka, Flink, Iceberg, PostgreSQL, protobuf/grpc.
- Developed and maintained analytics for the commodities PM team.
- R and Python on Linux.

Dexterity Capital

Senior Software Engineer

Remote (Massachusetts)

November 2021 - June 2022

- Developed and maintained exchange connectivity and backtesting infrastructure at a crypto HFT firm.
- Java and Python on AWS.

Venmo

Auburndale, MA/Remote (Massachusetts)

September 2019 - October 2021

- Senior Software Engineer
 - Engineer on the Payments team. Worked on the backend for features supporting millions of users including P2P payments, business profiles, and American Express integration.
 - Worked with SRE and infrastructure teams as on-call support for operations and deployments.
 - Python on AWS, including Django, MySQL, and MongoDB.

Walleye Trading

Plymouth, MN/New York, NY/Boston, MA

Software Developer

October 2017 - August 2019

- Developed and maintained software infrastructure for a technology-driven hedge fund, including execution, analytics, and back office.
- Java on Windows and Linux.

Bloomberg

New York, NY

Senior Software Developer

February 2013 - September 2017

- Developed and maintained software infrastructure for options order routing and algorithmic trading at the Tradebook agency broker.
- Mainly C++ on AIX and Linux.
- Spent six months in the Equity Application Framework group. Worked on adapting Cassandra and HBase to Bloomberg infrastructure.
- C++, Java, Python on Linux.

Volant Trading

Quantitative Developer

New York, NY March 2010 - October 2012

- Developed and maintained software infrastructure at a high-frequency options market maker.
 Worked with analysts and traders to implement and improve analytics and quant trading strategies.
- Monitored trading systems and daily data processing.
- Mainly C++ on Linux. Some Perl, Python, SQL, bash. Some C# on Windows.

• HBK Quantitative Developer New York, NY October 2007 - November 2009

- Developed and maintained software infrastructure in the statistical arbitrage group at a multi-strategy hedge fund. Redesigned automated trading application to use multiple threads. Improved simulation and reporting environments.
- Wrote scripts for research and reporting functions.
- Ran simulations and monitored trading.
- C++, Perl, SQL on Windows and Cygwin.

Tower Research Capital

Software Developer

New York, NY July 2005 - October 2007

- Developed and maintained market data and trading infrastructure at a proprietary trading firm.
- Provided software support for analysts.
- Wrote programs and scripts for research, risk management, and accounting functions.
- C/C++, Perl, Python on Linux.

MIT Department of Biology

Cambridge, MA

Research Assistant

June 2001 - August 2003 (summers), June 2004 - June 2005

- Research assistant in a computational biology lab.
- Wrote programs to simulate mRNA splicing and locate exons in human genomic sequences.
- Wrote GUI applications to visualize genetic data.

Education

Massachusetts Institute of Technology

Cambridge, MA

• Master of Engineering in Electrical Engineering and Computer Science. September 2005. Bachelor of Science in Computer Science and Engineering. June 2005. GPA: 4.7/5.0.

Indiana University East

Remote

• Bachelor of Science in Mathematics. Expected May 2026. GPA: 4.0/4.0. Various subjects in pure and applied mathematics.

Cherry Hill High School West

Cherry Hill, NJ

• Diploma. June 2000. GPA: 4.0/4.0. Valedictorian. SAT I: Math: 800; Verbal: 800. Awards: National Merit Scholar; AP National Scholar; Member, 2000 US Physics Team.

Skills

Programming languages: C/C++, Java/Kotlin, Rust, Python, SQL. Earlier: Scheme, Perl, Assembly, QBasic.

Cloud platforms: Basic experience with AWS, Azure (AZ-900 certification), GCP.

Operating systems and development environments: Longtime GNU/Linux, emacs, and bash loyalist. Comfortable with JetBrains IDEs. Limited Windows development experience. Competent user of most modern platforms including Unix-likes, Windows, macOS, Android, and iOS.

Mathematics: Undergraduate-level understanding of calculus, linear algebra, probability and statistics, data structures and algorithms, number theory, abstract algebra, and real analysis. Clearly a fan of LATEX.

Finance: Passed CFA Level I exam. Experience with software handling market data and trading for equities/futures/options/crypto/private credit. Bloomberg Terminal experience. Basic Excel.

Crypto/DeFi: Various Ethereum tooling including Alloy, Foundry, Solidity, and Huff. Some familiarity with Uniswap and other DeFi platforms. Some experience with CeFi market data and trading APIs.

Other: Extensive musical performance experience across several instruments and genres, including guitar/bass/piano/voice. Experienced swimmer/cyclist/runner and completed several marathons and triathlons.