Mike Rolish

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

Experience

- **Geode Capital Management** — Boston, MA
  Principal Software Engineer — August 2022 - present

  – 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** — Remote
  Senior Software Engineer — 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
  Senior Software Engineer — September 2019 - October 2021

  – 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** — New York, NY
  Quantitative Developer — 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**   New York, NY
  Quantitative Developer   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**   New York, NY
  Software Developer   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.

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, Python, Perl, SQL, Assembly, LISP variants, HTML.

Operating systems and development environments: GNU/Linux enthusiast. Emacs loyalist. Java development in IntelliJ. Some user and development experience with Solaris, AIX, and BSD. Some Windows development experience, including Visual Studio and SQL Server. Some Mac user experience. Android user.

Mathematics: Some statistics, linear algebra, calculus, discrete math/algorithms.

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

Other: Extensive musical performance experience across several instruments and genres, including guitar/bass/piano/voice. Experienced swimmer/cyclist/runner and completed the 2011 NYC Marathon and 2012 NYC Triathlon.