

Mike Rolish

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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.

Experience

HBK New York LLC

New York, NY

- Quantitative analyst October 2007 - present
 - Developed and maintained software infrastructure in the statistical arbitrage group. Improved simulation, trading, and reporting environments.

Tower Research Capital LLC

New York, NY

- Software developer July 2005 - October 2007
 - Developed and maintained market data and trading infrastructure at a hedge fund specializing in high-speed automated trading. This infrastructure, a series of distributed applications written in C++ and running on Linux, managed real-time communication with various exchanges, brokerages, and data services. It also provided tools for analysis of large quantities of live and historical data.
 - Provided software support for quantitative analysts.
 - Wrote documentation and provided training for new developers and analysts.
 - Wrote programs and scripts for research, risk management, and accounting functions.

MIT Department of Biology

Cambridge, MA

- Research assistant June 2001 - August 2003 (summers), June 2004 - June 2005
 - Research assistant in the Burge computational biology lab.
 - Wrote GUI applications to visualize genetic data.
 - Wrote programs to simulate mRNA splicing and locate exons in human genomic sequences.
 - Studied relative importance of cis-elements involved in splicing, including splice sites and enhancer/repressor elements.

Skills

Programming languages: C, C++, Java, Perl, Python, Scheme, Assembly.

Operating Systems: GNU/Linux and various flavors of UNIX, Windows.

Developer concepts: Object-oriented programming and design patterns, algorithm design, network programming and the client-server model, concurrency, debugging and profiling, usability and user interface design.

Mathematics: Basic statistics, linear algebra, calculus, discrete math.

Publications

- Wang, Z., Rolish, M. E., Yeo, G., Tung, V., Mawson, M., & Burge, C. B. (2004). Systematic identification and analysis of exonic splicing silencers. Cell, 119, 831-845.

Hobbies and interests

- Music, philosophy, politics, linguistics, Linux.