Matthew S. Bane

1750 N. Cleveland Ave.

Unit B

Chicago, IL 60614

312-420-6473 (cell) matthewsbane@gmail.com http://www.matthewsbane.com/ https://www.linkedin.com/in/matthewscottbane

### Education

### DePaul University, School of Computing and Digital Media

Chicago, IL

June 2014

Master of Science in Computer Science

- Concentration in Artificial Intelligence

University of Pennsylvania, Wharton School

Philadelphia, PA

Bachelor of Science in Economics

December 2000

- Concentration in finance

# Work Experience

Conversant Chicago, IL

Software Engineer - Ad Server

September 2014 - Present

- Design and implement new features and enhancements on a distributed ad server delivering real-time digital advertisements.
- Work with other Engineers and Product Managers to establish and refine clear requirements which align with business goals.
- Write robust, high-performance Java code for a high throughput, low latency system.
- Write unit tests, test code in production environment, work with QA to create new tests and ensure coverage for all existing and new features in QA environment.
- Work with Product Managers to verify releases of new features and troubleshoot any production issues.
- Conduct performance testing and monitoring of production systems.

M&N Trading

Chicago, IL

Quantitative Trader and Software Developer

February 2013 - September 2013

- Traded U.S. fixed income cash and futures markets using an automated statistical arbitrage trading strategy.
- Developed trading algorithms in C# using CQG Trading API.
- Used R to perform data analysis, build experimental trading models, and extract data from Microsoft Access database.
- Created XML files and wrote code to serialize and transfer data between various applications.

## Hard Eight Futures, LLC

Chicago, IL

Quantitative Trader and Software Developer

April 2012 - January 2013

- Researched, developed, and traded automated applications in the U.S. fixed income cash and futures markets and U.S. equity futures markets using a statistical arbitrage trading strategy.
- Development done in C# with Trading Technologies, TT API.
- Applied various financial data analysis and modeling techniques to price futures markets with a term-structure, reducing dimensionality and facilitating computation.
- Implemented and maintained a Microsoft Access database to warehouse extensive amounts of financial data.

#### Gelber Group, LLC

Chicago, IL

Quantitative Trader and Software Developer

March 2008 - August 2009

- Researched, developed, and traded automated mid-frequency trading applications for FX cash and futures markets, crude oil, natural gas, corn, soybean, and wheat futures markets.
- Utilized GVelocity a proprietary trading API written in C# to develop applications.
- Performed various financial data analysis using Excel with a Bloomberg add-in to extract historical price data and other related financial data.

### Gelber Group, LLC

Chicago, IL

Proprietary Trader

 $June\ 2002\ \hbox{-}\ December\ 2008$ 

- Managed a trading account specializing in U.S. and European fixed income, equity, commodity derivatives (futures and options), and their underlying cash instruments.
- Employed methods of relative value, statistical arbitrage, and market making to take advantage of short-term price discrepancies.
- Utilized mean reversion and pairs trading for multi-day strategies.

- Performed daily statistics to monitor profitability and risk.

### Group One Trading LP

Chicago, IL

January 2001 - January 2002

Trader Trainee, Chicago Board Options Exchange

- Assisted traders with risk management activities updating delta, gamma, theta, and vega parameters and applying appropriate underlying hedge for multiple equity options.
- Updated traders positions to reflect current market volatility estimates.

## **Technical Skills**

Languages: Java, C#, Python, SQL, R, Bourne Again Shell, Sed, Awk, Grep, HTML, XML, JSON, EXCEL

Technologies: Kafka, Simple Binary Encoding(sbe), flatbuffers, Protocol Buffers, JAXB, JAX-RS, JAX-WS, Jetty, Netty,

JMH, Trove, Docker, OpenRTB

 $\ \ \, \textbf{Operating Systems:} \ \, \textbf{Linux, Windows} \\$ 

IDE: Intellij, Eclipse, Vi, Visual Studio

Project Management: Git, Jira, Bamboo, Confluence, Kanban, Scrum, Agile Development

Miscellaneous: Excellent troubleshooting and debugging skills