

## WORK EXPERIENCE:

### • 01/17 - Current: DataWarhorse – New York, NY

- Risk Management and Software Development (C#, SQL, AZURE)
  - Combined risk management, artificial intelligence, and alternative data to construct and optimize hedge fund portfolios.
  - Constructed a multivariate-hedge of a client's international portfolio to suit a FOF investor's market neutral risk profile.
  - Implemented a monte-carlo best-first search algorithm that uses structured randomness to optimize portfolio hedges.
- Built cloud-based ASP.NET MVC website for client access and data entry, iOS and Android apps, and Alexa skills for voice.
  - Built a virtual risk manager on top of Amazon Echo to answer clients' questions re their portfolio's risk and exposures.
- Designed ETL framework for unstructured alternative data including social media, eCommerce and crowd sourced sites.
  - Captured social media purges and food poisoning incidents to realize investable opportunities before the market knew.
- Researched and added support for re-distributable international market data including fixed income and derivatives.
- Implemented secure file uploads/downloads and user access using IIS / HTTPS rewrites, including 2FA via Authy.

### • 01/17 to 11/17: Tremblant Capital Group – New York, NY

- Consultant: supported risk management and data warehouse system including risk analytics, reports, and debugging.

### • 06/09 to 01/17: Tremblant Capital Group – New York, NY

- Director, Risk Management and Software Development (C#, SQL, PYTHON)
  - Designed and created risk management and data warehouse system ("DW") used by everyone at the firm over 9 years.
  - DW was praised by industry professionals as "among the top of all hedge funds [200+] we have reviewed in 25 years".
  - Implemented risk library including stress tests, factor analysis, liquidity calcs, performance attribution, and alpha/beta.
  - Designed and developed 3 user interfaces/UX: web for data entry, Silverlight for analysis, Excel add-in for power users.
  - Produced intraday, daily, and monthly reports for trading, operations, risk management, compliance, IR, and PMs.
  - Worked on position, trade, and class levels; took in market data, security data, and user data (price targets).

### • 03/08 to 01/09: Blue Mountain Capital Management – New York, NY

- Quantitative Strategist
  - Created full-stack software to optimize margin, calculate risk, and assign trades using WPF's M-V-ViewModel and WCF.
  - Introduced and implemented continuous integration including SVN for SCM, JetBrains' TeamCity, and Edgewall's Trac.

### • 05/06 to 03/08: UBS Prime Brokerage – New York, NY

- Development Manager
  - Managed team of developers and front-end client technology including real-time P&L, trade management, & deployment.
  - Analyzed, built, and championed multi-threaded MVC framework; managed interview process and onboarded employees.

### • 03/05 to 05/06: Sungard Trading Systems / Brass – Jersey City, NJ

- Programmer Analyst: built DMA front-end in C# and SDK in Microsoft C++; implemented trade execution algorithms.

### • 06/00 to 03/05: Crestron Electronics – Rockleigh, NJ

- Software Engineer: developed client-facing technologies using MFC and Microsoft Office object model (Excel, Outlook).

## TECHNICAL SKILLS:

<b>TECHNOLOGIES</b>	<b>C# &amp; .NET</b>	SQL & ADO.NET	ASP.NET MVC	WPF & Silverlight	Python	JQuery & HTML5		
<b>DATA LAYER</b>	SQL Server	EF (Entity Framework)		LINQ		DataTables.NET		
<b>ETL</b>	RESTful APIs	WCF / Web Services		XML / XSL / XSLT	Regex			
<b>DATA PROVIDERS</b>	Bloomberg	Reuters	Quandl	Intrinio	EodData	EDI	IEX	Orats
<b>DEV TOOLS</b>	SVN & GIT	TeamCity	ReSharper	PostSharp	Azure	AppCenter	CLR Profiler	VSTO
<b>SECURITY</b>	HTTPS	IIS Rewrite		2FA (Authy)	SFTP		Encryption	
<b>RISK EXPERTISE</b>	Alpha / Beta	Performance Attribution	Liquidity		Factor Analysis		Stress Testing	

## PROFESSIONAL DESIGNATIONS:

CFA® Charterholder FRM (Financial Risk Manager)

## EDUCATION:

New York University - New York, New York

MS in Computer Science

Artificial intelligence, data mining, machine learning

Lehigh University – Bethlehem, Pennsylvania

BS in Computer Engineering

BA in Economics