

## Qualifications

Software Engineer with 20+ years of experience in software development. I have extensive experience in user interface design and development and in architecting highly scalable systems utilizing both distributed and mobile computing technologies.

## Work Experience

### Market Track, LLC

Chicago, IL.

02/14 - Present  
Full Time

#### *Senior Vice President of Client Facing Technology*

- Leading a geographically distributed team of developers to create a best of breed marketing and advertising analytics and search platform. This include integrating multiple front and backend systems into one simple yet powerful user experience while also creating a blazing fast analytics engine to serve up visualizations and search results in NRT.
- Responsible for managing budget, recruiting, architecture, and implementation of all client facing applications.

#### *Skills*

NodeJS, AngularJS, JQuery, WebPack, Grunt, LESS, CSS, HTML5, TypeScript, JavaScript, Java, Spring MVC, Spring Boot, redis, Solr, Mongo, nginx, tomcat, git, IntelliJ, WebStorm, Eclipse, Oracle, MySQL, MSSQL, Maven, Travis CI, AWS, HighCharts

### Allston Trading, LLC

Chicago, IL.

04/12 - 02/14  
Full Time

#### *Technical Lead*

- Lead a team that's responsible for Data Engineering across the entire firm. This includes developing and managing a data cluster used for financial simulations, live & historical market and metadata, databases, and more.

#### *Skills*

Java, Hadoop, Hbase, Hive, Pig, mercurial, Eclipse, MSSQL

### CME Group

Chicago, IL.

05/10 - 03/12  
Full Time

#### *Director, Lead Software Architect*

- Architected and implemented a full internationalized Java OSGi based exchange surveillance tool. This tool was developed to allow the exchange to accurately and quickly surveil the state of the market and act on it as necessary. The tool quickly and intelligently handled hundreds of thousands to millions of data points and gave the user tools to quickly visualize, aggregate, and filter down to the information they need.
- Taught and lead a development team toward following an Agile and TDD development methodology. I regularly lead sprint planning, estimating, daily stand-ups, and retrospectives for the team. We attained an 80% code coverage testing goal with a high degree of cohesiveness, regular design reviews, and constant code reviews.

#### *Skills*

Java, Spring, Spring MVC, OSGi, Eclipse Virgo, Ehcache, SL4J, HTML5, CSS3, JavaScript, JQuery, Tibco, Maven, Eclipse, Oracle, git, Clear Case

**NaNil, LLC.**

Oak Park, IL.

01/09 - Present  
Part Time*Founder & Samurai*

- Developed a custom iOS application series for architectural tours called FanGuide. It has a completely custom user interface and was developed against iOS 2 & 3 for both the iPhone and iPod Touch. It is intended to offer a full multimedia experience including audio, video, images, interactive maps, offline maps, web, and more.
- Created a reusable architectural CMS & deployment framework to allow multiple applications to be created with arbitrary pluggable content.
- Closely worked with multiple graphics designers on wireframes, mockups, and POC's for the application.
- Designed and implemented the company website.

*Skills*

iOS, Objective-C, MapKit, Core Data, Core Graphics, Core Location, Quartz, UIKit, WebKit, HTML, CSS, JavaScript, JQuery, Xcode, MySQL, Markdown, Subversion, git

**WideAsleep, LLC.**

Downers Grove, IL.

02/08 - 12/10  
Part Time*Founder & Software Artist*

- Designed, developed, and released the Fairway Golf iOS application to the iTunes AppStore for the stores initial release. It's a simple easy to use golf training application for managing your bag, clubs, and swings.
- Designing and developing several iOS and Mac OS applications that are yet to be released.
- Create the website and all associated content for WideAsleep and it's products.

*Skills*

iOS, Mac OS, Objective-C, SQLite, UIKit, Quartz, AppKit, HTML, CSS, JavaScript, MySQL, Xcode, Subversion, git

10/09 - 05/10  
Full Time*Consultant*

- Created a custom system to aid in automating new and prospective customer to quickly get into existing trading systems. Leveraged C# 3.5, WinForms, WCF, SQL Server, and Oracle.

*Skills*

C#, WinForms, WCF, Log4Net, NUnit, Visual Studio, SQL Server, Oracle, TFS

09/06 - 05/08  
Full Time*Consultant*

- Created a new Wealth Management Investment, Prospecting, Fulfillment, Rebalancing, and Monitoring Platform from scratch in C#. Responsible for initial brainstorming, knowledge gathering, requirements definition, application architecture, and implementation.
- Worked with the client to drive new programming practices and technologies for C# .NET 2.0 & 3.0.
- Designed and implemented a new innovative Wealth Management User Interface that challenged the clients traditional approaches. I was the UI development lead responsible for ensuring platform consistency and intuitive design. I worked with the business through various designs and mockups eliciting feedback from all levels of the organization. I was also the lead on implementing and releasing the initial UI of the application into production.

*Skills*

C#, WinForms, FlowChart.NET, SourceGrid, NHibernate, Log4Net, NUnit, SQLite, SQL Server, Visual Studio, Oracle, Subversion

05/08 - 10/09 Full Time	<b>DRW Trading Group</b>	Chicago, IL.
	<i>Senior Software Developer</i>	
	<ul style="list-style-type: none"> <li>• Designed and implemented a near real-time (&lt; 100 ms processing) position management system for the front office capable of handling millions of trades per day. This system was also able to be generically queried to generate position data on demand. It was developed entirely in C# .NET 3.5 and used 29 Wests LBM for low latency interprocess communication.</li> <li>• Developed a new operations frontend to enable monitoring in near real-time of equity trading. It allowed them to quickly perform arbitrary queries and filters to narrow their view of trades. It also facilitated operations to do full trade lifecycle (create, update, delete) management including capturing and application of corporate actions.</li> <li>• Developed several adapters to import external trade and clearing related data into our internal trade store. This was used for position reporting and reconciliation.</li> <li>• Developed a tool to allow operations to categorize and tag imported clearing data to assist during trade reconciliation.</li> </ul>	
	<i>Skills</i>	
	C#, LBM, Retlang, SourceGrid, NUnit, Memcache, Spring, Log4Net, SQLite, SQL Server, Oracle, Visual Studio, Ant, Subversion	
08/02 - 09/06 Full Time	<b>Bank of America</b>	Chicago, IL.
	<i>VP – Software Engineering</i>	
	<ul style="list-style-type: none"> <li>• Redesigned a real-time trading bridge to handle high availability, redundancy, load balancing, increased QoS, and scalability using various distributed computing techniques. Heavy use was made of Reliable Multicast, JCache, J2EE, JMS, CORBA, Concurrent Programming Patterns, and Workflow.</li> <li>• Developed a CORBA bridge to facilitate real-time communication between the Objective-C and Java trading engines.</li> <li>• Wrote tools to handle near real-time reporting, auditing of load, performance, errors, and more.</li> <li>• Managed the team of developers that architected the new trading bridge on time for 15+ releases, provided tools to automate build and deployment, and handled 24/7/365 production support.</li> </ul>	
	<i>Skills</i>	
	Java, JMS, JCache, CORBA, BEA, EJB, JNI, JINI, NeXTStep, Tomcat, Sybase, Oracle, JBuilder, Eclipse, Ant, Clear Case	
04/01 - 04/02 Full Time	<b>Parlano</b>	Chicago, IL.
	<i>Software Architect</i>	
	<ul style="list-style-type: none"> <li>• Managed a team of developers for a major product release of the MindAlign enterprise collaboration software.</li> <li>• Functioned as the lead web architect responsible for all web technology decisions.</li> <li>• Migrated the system architecture from Java, C, and Perl to a J2EE implementation. The final product was a system that was more scalable, highly available, redundant, and more fault tolerant than our previous architecture.</li> <li>• Responsible for the complete development lifecycle of the MindAlign web client. This client intelligently handles rendering for varying browser types, integrates into any J2EE compliant servlet container, can be embedded into any web page, and has API's that allow it to be easily extended and integrated into other systems.</li> </ul>	
	<i>Skills</i>	
	Java, Struts, HTML, CSS, JavaScript, Perl, Tomcat, JBuilder, Perforce	
04/00 - 04/01 Full Time	<i>Senior Software Engineer</i>	
	<ul style="list-style-type: none"> <li>• Participated in 3 point releases with lifecycles that included requirements gathering, development, testing, and optimization.</li> <li>• Developed a reusable Perl tagging/template engine for use in the application web site, client, and server configuration. This template engine included support for runtime changes and custom branding in the web tier.</li> <li>• Designed and developed an application web site that extends the desktop application to add management and searching features.</li> </ul>	
	<i>Skills</i>	
	Java, Struts, HTML, CSS, JavaScript, Perl, JBuilder, Perforce	

- 01/00 - 04/00  
Full Time
- iExplore, Inc.** Chicago, IL.  
*Senior Internet Application Developer*
- Architected and implemented a distributed JDBC redundancy and fail over system in Java.
  - Developed a content management tool in Java and XML that synchronized Dynamo application server content with content in an Oracle database.
  - Worked with a team of developers that designed, developed, and deployed an adventure travel web site.
- Skills*  
Java, Dynamo, Oracle
- 01/99 - 12/99  
Full Time
- MyPoints.com, Inc.** Schaumburg, IL.  
*Web Engineer*
- Developed and supported their offline transaction processing system. This system was used to award points and enroll new members into the MyPoints environment.
  - Proposed and championed standards in documentation and coding guidelines. This included maintaining the internal developer web site and writing specifications and proposals of these standards.
- Skills*  
Perl, PL/SQL, bash, Oracle
- 08/97 - 12/98  
Full Time
- UBS** Chicago, IL.  
*Software Engineer*
- Developed and supported a real time collaboration application in Java. This system was deployed as the enterprise wide standard to over 15,000 users and to several external clients.
  - Deployed the Castanet application distribution and management system globally to 20,000+ users. Facilitated and developed toolkits to be used by other developers. This system deployed 50+ applications to employees and customers.
- Skills*  
Java, IRC, Marimba, NeXTStep, RCS
- 05/96 - 08/97  
Intern, Part Time
- Software Engineer*
- Maintained and created content and applications for several internal departmental web servers. The work on these applications facilitated the funding of the emerging web technologies within the company.
  - Researched and reported on advanced technologies to a technology committee.
- Skills*  
HTML, Perl, RCS

## Education

- 1992 - 1997
- The University of Michigan College of Engineering**  
*Bachelor of Science in Computer Engineering*
- Evans' Scholarship. Four-year, full tuition and housing scholarship.
  - Active participant in ACM, IEEE, and MiNUG
- Skills*  
Fortran, Pascal, Java, Perl, C++, HTML