**Erhan Hosca**

erhan@hosca.com +1 917 267 2525

Accomplished pragmatic IT professional with deep technology knowledge spanning multiple domains through experience focused on software system architecture, analysis, design, implementation and deployment. Excellent communication skills and creative problem-solving abilities.

**Skills**

C#, .NET, ASP.NET Core, Web API, Swagger, ASP.NET MVC, JavaScript, React, Redux, Knockout, OpenFin, jQuery, WPF, XAML, Prism, MVVM, NUnit, Git, TPL, VBA, MS SQL Server, T-SQL, TeamCity, Jenkins, Ansible, Entity Framework, NHibernate, LINQ to DB, LINQtoSQL, GemFire, XML, Software Architecture, Design Patterns, Web Services, Amazon AWS/EC2, REST, Unit Testing, Agile

**Work Experience**

**Vice President - Merrill Lynch August 2016 to Present**

Various Web API Microservice Projects

* User activity tracking service: Built a RESTful user activity tracking microservice for collecting user actions from various different OpenFin applications that aggregates to management dashboard for activity tracking. Published NPM modules for easy client on-boarding.
* Application configuration service: Built a RESTful application configuration microservice for storing and managing application/user settings across machines.

Technologies used: ASP.NET Core Web API, Swagger, LINQ to DB

Build and Support of Flavor Builder

* Flavor Builder is a tool that allows end-users to manage sets of parameters that algo engines consume during trade processing.
* Leveraged JSON schema for dynamically generating UI elements allowing for parameters to be added and removed dynamically without requiring code releases. Also includes a home brewed approval process for auditing changes made.

Technologies used: React, Redux, OpenFin, BitBucket

Build and Support of Xenon

* Xenon is ETT’s strategic service for persisting, maintaining and distributing non-instrument client reference data for electronic trading through a SPA web front-end.
* Introduced the team to DevExtreme UI toolkit that leverages Knockout.
* Implemented various different data management screens.
* Implemented fully configurable logging/instrumentation using AOP techniques with real-time monitoring with Splunk.
* Mentored junior developers on the team.
* Setup a Continuous Delivery pipeline integrating BitBucket, Jenkins and Ansible Tower.

Technologies used: C#, ASP.NET Web API, Knockout, DevExtreme, NHibernate, Oracle, Splunk, NUnit, BitBucket, Jenkins, Ansible Tower

Build and Deployment of Catalyst

* Catalyst is a trader facing OMS built on top of internally developed proprietary framework named Phoenix.
* Assisted as a SME for re-designing critical elements of the application for visual performance.
* Used lightweight control templates in conjunction with dynamically generated binding proxies to greatly enhance perceived UI performance of the application.
* Acted as a release manager to coordinate delivery of application binaries to end users using TeamCity jobs.
* Wrote unit tests.

Technologies used: C#, WPF, Prism, Telerik, AMPS, Git, TeamCity, NUnit

**Senior Manager - SunGard AS August 2014 to August 2016**

Client: Morgan Stanley: Stix re-write project

* Stix is a trader facing, cross asset, global GUI application for ticket entry and stewardship originally written in WinForms.
* Assisted as a SME for re-architecting key features of application with WPF/Prism all-the-while adding new functionality required by traders.
* Provided guidance to overseas developers on the team on best practices.
* Setup Continuous Integration and associated processes to provide automated builds and deployment.

Technologies used: C#, WPF, Prism, Infragistics, Cps Pub-Sub, TeamCity, NUnit

**VP. Applications Developer Lead - JPMorgan Chase August 2012 to August 2014**

Build and Deployment of Insight Trader Workstation

* Insight Trader Workstation is a real-time trader facing GUI that facilitates ticket entry, position and PnL monitoring.
* Implemented required functionality and contributed to overall architecture with emphasis on performance and quality metrics.
* Served as an SME for DevExpress controls focused on heavy user interaction.
* Implemented an expression-based styling engine.
* Implemented custom editors for displaying bond prices in fractions of 32’s.
* Wrote unit tests.

Technologies used: C#, WPF, Prism, DevExpress, Reactive Extensions, ActiveMQ, NUnit, Jenkins

**Senior Consultant - Risk Focus Inc October 2009 to August 2012**

Client: Risk Focus: Setup distributed infrastructure across on-premises and external cloud environments

* Setup and managed various environments for on-premises using Hyper-V, Amazon AWS and Rackspace to be used for on-demand client demos, Exchange, Subversion and Confluence servers. Performed P2V, V2V migrations.

Technologies used: Amazon AWS, Amazon EC2 API, Hyper-V

Client: Risk Focus: Business Activity Monitor

* Designed and developed a business activity monitor front end to Alloy OTC Trade Lifecycle Framework. Using the observer pattern applied to JSON messages sourced from either TibCo/EMS or Oracle, BAM allows for in depth analysis/debugging of various different activities that can be performed by Alloy.
* Wrote unit tests. Setup automated builds in TeamCity.

Technologies used: C#, WPF, Prism, Reactive Extensions, Oracle, TibCo/EMS, JSON, NUnit, TeamCity

Client: Cantor Fitzgerald: Client portal website for Prime Brokerage

* Provided performance enhancements to an existing client portal for Prime Brokerage.
* Enhanced existing functionality by allowing end users to define and persists custom grid layouts across sessions.

Technologies used C#, Silverlight, Prism, Reactive Extensions, WCF/RIA Web Services, JBoss, SQL Server 2005.

Client: JPMorgan Investment Bank: System for calculating counterparty exposure to Lehman Brothers Bankruptcy

* Designed and developed (in collaboration with the Business Head on the Desk) a Bankruptcy Valuation System for Credit settlement of Lehman trades with LamCo: around 75K distinct trades covering all derivative products and spanning most trading systems at the Bank.
* The system was used to establish portfolio valuation for a particular counterparty as of a point in time
* Sourcing and extracting complete trade set across fragmented trading group systems
* Converting formats and enriching with appropriate market data
* Feed Risk systems to calculate sensitivities, aggregating and providing user reports

Technologies used: C#, Excel VBA, Sql Server, RiskMetrics

Client: Citigroup: Designed and Built a Custom Basket Management System

* Designed and implemented a SCSF/CAB GUI module that allows for lifetime management of baskets of various underlying asset classes. The GUI component translates user actions to FpML messages and publishes to a downstream TibCo message queue. Allows baskets to be associated and reconciled with Indices published by Mark-It Partners.

Technologies used C#, SCSF/CAB Framework, TibCo, FpML and GemFire

Client: Citigroup: Built a custom WinForms UI front end for GemFire cache

* Designed and implemented a WinForms application that allows for managing existing GemFire cache installations. The application handles all serialization/deserialization with dynamic objects that are created at runtime and allows for basic CRUD operations to be performed on cached entities. Users can submit arbitrary OQL to the cache and inspect the results in real time along with the ability to upload XSD’s that represent metadata for cached items.

Technologies used C#, GemFire NativeClient.

**Consultant - Hosca Technology Services, LLC August 2009 to October 2009**

Integrated real time sales tax rates to a popular e-Commerce package

* Designed and implemented a real time online tax rate lookup service to accurately calculate sales tax amounts based on buyers shipping address in compliance with the local tax jurisdiction that is in effect. The service uses an external web service interface coded in C# which is called from a managed assembly hosted by SQL Server 2008. Resulting architecture also includes caching for improved performance and requires zero code changes on the e-Commerce source code.

Technologies used: C#, SQL Server 2008, ASP.Net, IIS7

**Technology Director - Mr. Youth LLP August 2008 to July 2009**

Delivery of technology solutions to clients and internal teams

* Served as an SME for evaluating and ultimately implementing technology solutions proposed to clients. Managed in-house team of developers providing technical strategic direction and guidance within budget and schedule. Established coding standards and extensible architectures with focus on code quality and re-use. Designed data models for various one-off projects using SQL Server 2005 and ADO.Net Entity Framework.

Design and architecture of Mr.Youth's main LOB web application

* RepNation is Mr.Youth's main line of business application that connects its 70k+ end-users to various marketing and advertising opportunities. Replaced the existing search algorithm to take advantage of lambda functions to allow structured and serializable search criteria to be used.
* Architected a thread-based e-mail system that allows users to communicate with each other and their managers. Designed data models, tables, views, stored procedures and UDF’s to meet business and coding requirements. Performed various database optimizations to improve query times.
* Managed database rollouts to production servers.

**Sr. Manager - Smart & Associates, LLP April 2006 to July 2008**

* Client: Intuit Real Estate Solutions: Re-engineered client data import modules for IMPACT
* Client: Banc of America Securities: Designed and built Middle Office PnL Management System
* Client: Banc of America Securities: Architected an extensible reconciliation framework

**Sr. Technology Officer - JPMorgan Chase August 2003 to April 2006**

* Selected for the Expert Engineer (E2) Development Program
* Database migration project for Bond Sensitivities Tool
* Built a dual interface COM component that allows easier consumption of various Web Services from Excel
* MS SQL Server Development and Administration
* Built an OLAP Cube for Risk Analysis
* Interest Rate curve monitoring utility
* Built a fully automated analysis process around a previously developed trade pricing engine
* Implemented an intranet website for group collaboration and information sharing (Wiki)

**Lead Systems Developer - Turner Broadcasting Systems, Inc August 1998 to August 2003**

* Designed and built a system for generating, managing and tracking electronic invoices
* Created a departmental corporate intranet website
* Enhancements to the existing advertisement broadcast schedule system
* Built a system for generating and managing advertisement broadcast schedules
* Built an advertisement spending and ratings tracking system

**Education**

**Master of Science in Mining Engineering**

Virginia Polytechnic Institute and State University - Blacksburg, VA January 1995

**Bachelor of Science in Mining Engineering**

Middle East Technical University - Ankara, TR May 1993

**Certifications / Licenses**

**Microsoft Certified Solution Developer for Microsoft .Net** May 2006

**Microsoft Certified Professional (MCP)** November 2001