



# Tim Hsu

Professional Software Engineer

## Summary

Worked in software development for 15+ years. Started in Silicon Valley, then moved to HK. Majority time was a C++ developer but moved to C# .NET. Consider myself a fullstack developer focusing on financial markets.

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## Professional Skills

C++ / C# .NET	WPF, API, MVC, MVVM
OOP & Design Patterns	Agile, CI/CD, TDD, SCRUM
Data Structures & Algorithms	IPC & Multi-threading

## Work Experience

Senior Software Engineer ♦ 10kM Trading Ltd.

April 2022 - November 2022

- Lead agile team to develop high frequency-low latency Market Making services/strategies
- Lead the development of Market Data, OMS, FIX connectivity, WebUI, etc in C# .Net Core
- Developed quant and algorithms for real-time automated trading/hedging for Spot/Futures
- Developed in house hedger/executor for traders in C# WPF to easily liquidate crypto assets

Senior C++ /C# .NET System Analyst ♦ Sharp Point Ltd.

January 2019 - March 2022

- Developed new derivatives trading platform in C# .NET Core, WPF, Prism MVVM
- Developed FIX4.2 connectivity with brokers written in C++11, Boost ASIO
- Wrote various micro-services in both C++/C#, C++/CLI, scripts
- Implemented web services, web sockets, web api, windows services, AWS cloud

Senior .NET Consultant ♦ Avanade

November 2017 - December 2018

- Provided .NET consultancy to various fortune 500 clients, including Accenture
- Used C# Web API 2.0, MVC, Message Queue, Asynchronous calls, MSSQL, MSUnit
- Worked in Agile/SCRUM methods including CI/CD, TDD, BDD, SpecFlow, refactoring
- Helped in DevOps, releases, Jenkins, JIRA, Confluence, Selenium, Microsoft Azure

Lead Analyst Programmer ♦ Concord Pacific Satellite Technologies Ltd.

November 2015 - June 2017

- Lead cross-regional Agile team to develop GPS Fleet Management SAAS solution
- Lead front-end development team using Javascript, JQuery, AngularJS, JSON, Bootstrap
- Revamped SOA backend using C# .NET, MySQL, TCP/IP sockets, threads, SOAP & WCF APIs
- Introduced to team: Agile, TDD, NUnit, MantisBT, SVN, GIT, Skype, Google Maps

Contrator / Developer ♦ Global Talent Services Ltd. – Unisys Hong Kong Ltd.

January 2015 - November 2015

- Independant contractor implemented banking Signature Web Viewer Verification system
- Fullstack using VB/C# .NET, WCF, HTML5, CSS3, AngularJS, JQuery, AJAX, REST, MSSQL
- Part of full SDLC in various phases, staging, SIT, UAT, then LIVE

Software Engineer ♦ Sungard Global Trading Ltd.

August 2011 - December 2014

- Participated in development of real-time trading platform in WIN32 C++
- Worked with various teams OMS, FIX, Market Data, Market Access, and Exchange PMs
- Debugged trading algorithms, strategies on cash, equities and derivative market
- Cross functional teams using Agile, TDD, and daily SCRUM to meet sprint targets

Sr. Software Engineer ♦ QVIVO Ltd.

October 2010 - August 2011

- Developed cross platform media player in standard C++/STL, Boost library, threads
- Integrated Facebook API, cURL, AWS Cloud, IPC and memory sharing libraries
- Used Agile, TDD, Google unit testing, FFMpeg, Scaleform GFX, DirectX, OpenGL

Sr. Software Engineer ♦ Concord Pacific Satellite Technologies Ltd.

November 2008 - October 2010

- Web Traffic & GPS related fleet management software control
- Embedded media player development using WinCE C++ MFC, WIN32, COM, HTTP, FTP
- Developed backend in C Linux, sockets, POSIX threads, MySQL tuning

Sr. Software Engineer ♦ OPSWAT, Inc.

April 2005 - October 2008

- Part of team to develop Antivirus/Antispyware/Firewall SDK
- Implemented API library in OOP C++, C#, Java, PHP, HTTP/FTP/SMTP, XML, STL
- Integrated computer security, encryption, hashing MD5, SHA256, digital signatures

## Education

Bachelor of Computer Science ♦ San Francisco State University

1996 - 2002

Focused on System and Software Design. Network Communications. Integrated Circuits, Engineering. Data Flow Automata. Discrete and Complex Analysis.