

Product & Risk Management Team Leader Product & Risk Management Team Leader C++/ Python Developer, Quantitative Analyst Naperville, IL Pricing Quantitative Analyst/ Developer Skill Set

Key Words: Financial Derivative Pricing Model, Risk Management, C/C++/, Python, SQL Authorized to work in the US for any employer Work Experience Product & Risk Management Team Leader Space Network Tech Co - Shenzhen, CN September 2018 to June 2019 China. Led the product team of 3 people to manage the trading system risks; Designed the derivative products based on cryptocurrency and other underlyings; Guided the IT developers to provide the best product solutions to the trading system.

Senior Software Engineer (Python) BOA - Chicago, IL June 2017 to July 2018 FX Cash Team: worked on the Trading Framework Quartz with python; Focused on the FX Cash Trading UI app BAM!; improved existing code and made the new features such as post trades process including amendment, allocation, forward rate composition and other process.

Senior Software Engineer (C++ and Python) Jump Trading LLC - Chicago, IL October 2009 to May 2017 Improved and implemented the high frequency trading (HFT) system simulation framework in C++ which supported both the live simulation and the back testing. Developed and maintained the test scripts to test all kinds of gateways(stock, future, bond, currency, and option) and other infrastructure apps such as risk server, drop gateway and real time reconciliation service; Focused on the option trading application test using my strong option pricing theory to test all brand new option trading applications such as E&A, SOD loader, Risk Edge Bridge.

Senior Developer (C++ and C#) Nico Holdings LLC - Chicago, IL March 2009 to August 2009 Designed and implemented the Window's (PNL)Services in C# to replace the existing Matlab version; The Services subscribed and listened to the market data, user specified topics, database notification and dynamically calculated the PNL and publish/sent back the results to the clients for all relevant contracts on the events/requests. Created ftp and grep utilities in Visual C++ for the daily Log analysis for the operation team;

Quantitative Analyst and Developer (C++) Stark Investments LLC - Milwaukee, WI October 2005 to February 2009 Quant modeling and development in C++ and Linux. Designed and implemented pricing models for CDS (credit default swap), CDS options, and CDO (collateralized debt obligation) for a full life cycle. Built the models for option market implied stock

price distribution (lognormal, dual-lognormal and more), future dividends, and event move.

Interfaced some GSL (GNU scientific) libraries to a C++ classes. Provided model server production release and support; used CVS and SVN for source file version control. Quantitative Analyst and Developer (C++) named Eldorado Trading LLC - Chicago, IL March 2004 to October 2005 Designed and implemented the intraday price monitor and analyzer on the market data from CME, Bloomberg, and Dow Jones; Used the Fix/Fast protocol; Designed and implemented the real time multi-thread high frequency index arbitrage trading systems using extensively C/C++, Perl and socket programming skills; improved the trading system performance for futures (ES/SP, NQ/ND, etc) and other products. Consultant (C++) Wachovia National Bank - Charlotte, NC November 2003 to February 2004 Developed C++ APIs wrapping Sybase Open Client Libraries to make the interface the same as that of JDBC. Quantitative Analyst and Developer Stearns & Co. Inc - Chicago, IL April 2001 to June 2003 Theoretical Price Generator (TPG) for equity option electronic real time high frequency multi-threading trading systems on ISE Improved and built TPG, a multi-thread server on both Windows and UNIX platforms using C++/STL, Sybase (11 & 12), ACE and TIBCO/Rendezvous; applied Black Scholes model for European options and trinomial tree model for American options and control variate techniques to improve pricing accuracy; provided Delta, Gamma, Theta and more Greeks for traders to conduct hedging strategies; set and implemented unit tests and system integration tests; supported and communicated effectively with traders for daily production tasks. Designed and developed C++ libraries of numerical algorithms (including linear algebraic systems) for Kalman filter to automatically adjust skew surface from real-time trading data. Consultant (C++) Northern Trust Bank - Chicago, IL July 2000 to March 2001 Extensively used Sybase SQL Server (11) Open Client/Open Server, Stored Procedure and C++ on UNIX (SunOS 5.6) for the project Performance Investment Evaluation Reporting (PIER). Maintained the C++ server of Performance Review Report Data Extraction for portfolios consisting of stocks, bonds, fixed indices and their derivatives. Education Ph.D. in Geophysics York University - North York, ON M.S. in Geophysics Lanzhou Seismological Institute, State Seismological Bureau B.S. in Physics Jiujiang Normal College

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