**MR. SHANDONG HAN**

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**SUMMARY**

Extensive experiences in C++ & Java; also strong in scripting, web and database programming. Providing quick & elegant solutions with “KISS” in mind.

Extensive experiences in designing & developing complex, multithreaded, and efficient systems, including all tiers of multi-tiered and/or C/S architectures.

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| **OS:** | Linux, Unix, Windows |
| **Databases:** | ORACLE, SYBASE, MySQL, Derby (Java DB) |
| **Prog Langs:** | C++ (w/ STL), Java, XML, shell scripting, Perl, SQL, HTML, JavaScript |
| **Dev Tools:** | g++, make, ant, Eclipse, Visual C++, Visual Basic |
| **Middleware:** | Tibco R/V, JMS (ActiveMQ) |
| **Others:** | Apache, Tomcat, vim, Subversion, other open source projects, etc. |
| **Qualifications:** | JSDA Gaimuin (Security Sales Representative) Class 1 CertificateJSDA Internal Control Manager Certificate |
| **Languages:** | English (excellent), Japanese (good), Chinese (native) |

**PROFESSIONAL EXPERIENCE**

***Han Software Consulting Ltd. (Burnaby, BC, Canada) 2019.06 – present***

***Owner & Consultant***

Provide software development consulting services to clients. Current main client is Broadridge. (Java, Spring Boot, Spring MVC, JPA, PostgreSQL, Maven, Git)

***Orbis Funds (Burnaby, BC, Canada) 2018.05 – 2019.05***

***Software Developer***

Develop and support accounting IT systems that provides data and reports to other teams (accounting, settlement, etc.). (C#, VB.net, SQL, SQL Server)

***FinancialCAD (Surrey, BC, Canada) 2017.03 – 2018.05***

***Senior Software Developer***

Develop system that provides clients access to core functionalities via web service (Java, Spring): search (interpreting user’s input in URL into SQL queries), smart model (providing feature of customization using scripting languages to users), web service endpoints, etc. (Java, Spring Boot, Spring MVC, JPA, PostgreSQL, SQL Server, SQL, Maven, Git)

***SMBC Nikko Securities (Tokyo, Japan) 2015.06 – 2017.02***

***SeniorQuant Developer***

Mainly worked on TCA (Trade Cost Analysis) project: retrieve and process legacy order & execution data and parse them into tree structure; slice orders into pieces based on amendments for accurate performance calculation; calculate benchmarks; calculate performance against benchmarks; improved program’s performance by using multi-threading, in-memory database and optimized code (originally it took more than 1 week to process 1 day’s data; it was improved to about 1~2 minutes). (Java, SQL, Linux Shell, Oracle, KDB, Derby, Bloomberg’s BTCA, others)

Also implemented an alert system that analyzes clients trading history while watching orders during the day, and prompts sales traders of potential sales opportunities (Java, SQL, MySQL, KDB, Linux Shell).

***Nomura Securities (Tokyo, Japan) 2013.12 – 2015.06***

***Senior Developer***

Worked on JGB trading & pricing systems: maintained & worked on legacy code, including JGB trading & pricing systems and market data feed. (Java, C++, Unix Shell, others).

***Mizuho Securities (Tokyo, Japan) 2009.08 – 2013.06***

***Senior Quant Developer***

Worked as quant developer in Electronic Trading Team, researching, designing and developing calculation programs: based on Reuters’ RTCE (Reuters Tick Capture Engine), supporting date/time calculations of different locales, supporting many markets (Japan, HK, Australia, Singapore), supporting SOR, also being able to handle market changes (such as market hour changes and splits) seamlessly.

* pre-trade analytic tool: developed as an RTCE plugin,it calculates stocks’ trading metrics, provides pre-trade models, different flavor of stock/market volume curves, a rich set of aggregation functions working on trading metrics, and TCL programming interface (Visual C++, Windows DLL, TCL, RTCE).
* post-trade analytic tool: calculating different kind of benchmarks of orders and providing performance report of all the orders based on benchmarks (Java, TCL, RTCE)
* other projects: helping business users analyze markets and orders, such as Asian market overview, analysis on IOC orders of Japan SOR, etc. (Java, TCL, SQL, RTCE)

***Deutsche Securities (Tokyo, Japan) 2007.05 – 2009.07***

***Assistant Vice President (Algo Trading Senior Developer)***

* Worked on post-trade analysis, data retrieving and processing, report generation (Java, Sybase, SQL, Perl, shell)
* Designed and implemented rule-based market & order surveillance&alert system (CEP - Complex Event Processing):By monitoring markets, capturing sudden occurrences and sending out alerts, it made DSA desk’s support work possible (Java, Tibco RV, Drools Rule Engine, ActiveMQ, Oracle, Sybase, Apache, etc.)
* Developed on algorithmic trading application (Java)
* Wrote many scripts to improve quality & performance of IT support work (shell, Perl)
* Managed source code (SVN), and worked as build manager in Tokyo office on many global quant projects

***Mizuho Securities (Tokyo, Japan) 2006.03 – 2007.04***

***Assistant Manager (Fixed Income Senior Developer)***

* Developed pricing & risk management related calculation library for bonds and derivatives, including the calculation and process of date, price / yield, Greek letters of options, and risk management calculations of bond & derivatives (C++, Visual C++, Windows DLL, Python, Excel VBA)
* Fixed income trading application (Java, Sybase).

***Lehman Brothers Japan Inc. (Tokyo, Japan) 2004.01 – 2006.01***

***Algo Trading Developer***

Worked as key C++ developer, developing and maintaining algorithm trading systems. (C++, Java, shell script, Visual C++, SQL, Linux, Windows).

* Developed algorithmic trading systems (Linux, Windows, C++)
* Implemented GUI tools (Visual C++)
* Wrote a series of scripts to automate and ease the support work (shell)
* Maintained source code repository and managed build (CVS)
* Supported business users

***IONA Technologies Japan, Ltd. (Tokyo, Japan) 2002.05 – 2003.12***

***Software Engineer***

Worked on internationalization (i18n) tests and certifications of all products (Orbix, EI, XMLBus); implemented i18n test platform to ensure components of Artix to be i18n compliance; made J2EE & CORBA applications to test the products to make sure that they can be used successfully in Japan & China; analyzed and simulated customers' requirements in their projects; feedback issues and gave suggestions on i18n to engineering teams. (C++, Java)

***Financial Sciences Japan (Tokyo, Japan) 2000.07 – 2002.05***

***Software Engineer***

Worked on Unix-based, web-enabled, multi-tiered trading systems using Java. Responsibilities included designing and implementing visual/presentation/communication layers in Java, integrating them with the legacy system, and writing documents. Technologies used included J2SE (Core Java 2, JDBC, RMI, Swing), J2EE (JSP, servlet, JMS), XML, socket, as well as UML, SQL, HTML, etc. Software used included JBuilder, WebLogic, FioranoMQ, Tomcat, Apache HTTP server, Sybase, etc.

* Rebuilt flagship product ATOM (Advanced Treasury Operations Management) using Java.
* Designed & developed core tools library& programming framework: XML utilities, visual layer, web presentation layer (handles JSPs), middleware utilities, and GUI framework.
* NMS (Nihon Money Market System) project: developed front & back ends.

***Bell Systems Inc. (Tokyo, Japan) 1998.05 – 2000.06***

***System Engineer***

Worked on many 2-tiered (Client/Server) and 3-tiered business management systems using VB and VC++, as well as database-backed dynamic web sites using Perl, PHP, with databases including Oracle and Sybase.

* Job scheduling application: tray application for Windows (Visual C++ with MFC).
* Server side development: database batch job applications & data processing libraries (DLLs) in Visual C++ for VB programmers (Windows, ORACLE. Written in VC++, Pro \* C++, SQL and PL/SQL).
* GUI of Kodak PictureShotTM for Windows CE 2.1: (Win32 SDK & Visual C++)
* Database-backed dynamic web sites & administration pages (Unix, Oracle, Sybase, Perl, PHP, HTML, JavaScript).
* Business management systems GUI (Visual Basic, ODBC, ORACLE, SQL Server, SQL, stored procedures).

***Liaoning Rural Electricity Development Ltd. (Shenyang, China) 1996.06 - 1998.04***

***System Engineer***

Worked as architect &lead developer on designing and developing software products and tools.

* Designed and implemented inventory management system and remote electricity billing system (Windows, Access, Visual Basic, Visual C++ with MFC, SQL, AT instructions).
* Designed and implemented BASIC-like language interpreter asend users’ API, supporting functions, local variables and recursion (C++).
* Developed debug tools for C++ programs to detect pointer errors and memory leaks by reporting file names & line numbers (C++)
* Tool kit library for programming serial communication and modems (C++).

**EDUCATION**

Master's Degree in Thermal Engineering, Northeastern University (China) 1996

Studied numeric simulation of viscous fluid flow, heat transfer and combustion processes in furnaces; designed & implemented general purpose C program calculating physical processes of turbulent flow, heat transfer and combustion by solving partial differential equation set with various models.Created model simulating steels in furnaces.

Bachelor's Degree in Thermal Engineering, Northeastern University (China) 1993

Wrote a program in BASIC to do calculations for designing a reheating furnace as part of my bachelor’s thesis.