**Derek Li**

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**Summary of Qualifications**

* 5 years’ hand-on working experience on quality assurance and software development. Over 12 years of professional experience on programming.
* Highly skilled and experienced in agile development process for diverse requirements
* Sound knowledge of manual testing and automated testing. Strong debugging skills.
* Superior analytical, time management, and problem-solving skills.
* Highly motivated, proactive, quick learner, self-starter, responsible, goal-oriented.
* Available to learn and implement new programming language and system when necessary.
* Fluent in English, Mandarin and Cantonese, basic conversation skills in French.
* Willing to relocate to the USA, China, or Hong Kong.

**Education**

**Master of Applied Science, Information Systems Security 2010-2013**

Concordia University

Montreal, Quebec, Canada

Cumulative Grade Point Average: 3.72/4.3

**Bachelor of Computer Science 2006-2010**

Dalian Nationalities University

Dalian, Liaoning, China

Cumulative Grade Point Average: 3.5/4.0

**Computer Skills**

**Programming Languages:** C/C++, Java, COBOL, PL/X, JCL, Shell script, SQL, Perl, Python

**Technologies:** Visual Studio, J2SE, Junit, IMS, CICS, VSAM, Git, RTC

DataMining,DirectX, MS Office, Adobe Photoshop, Flash.

**Web Technologies:** XML, HTML,

**RDBMS:** Oracle, MySQL, DB2

**Design Skills:** UML, Design Pattern Object-Oriented Design

**Operating Systems:** Windows 9X/2000/ME/XP/Vista/7/8/10, Linux (Ubuntu,

Fedora, OpenSUSE, Debian), z/OS, AIX

**Network Protocols:** TCP/IP, DNS, HTTP, FTP, DHCP, ARP, UDP

**Work Experience**

**Staff Software Developer, Full-Stack Compiler Developer**

IBM Canada, Markham, Ontario Oct 2014-present

* Set up the new guidelines for all the other compiler testers on how to quickly and efficiently identity any compiler-related and testcase-related issues.
* Restructured the testing framework, and created a new wrapper for SVT and FVT, improved the performance of the whole testing, reduced the whole testing time from 36 hours to 6 hours for approximately 270K testcases.
* Worked on Enterprise COBOL compiler front-end in terms of new feature, identified front-end problems reported by internal tester and external customer, fixed defects.
* Worked closely with other DevOps folks on better merging testcases to GitHub, providing useful information on new tooling such as early warning, Taas (Test as a service).
* Met with the customers, shared the experience with them, introduced the new features of the latest products, and gave them suggestion on their real-life problems.
* Kicked off the regression test run by redesigning the testing tools, dynamically monitored the testrun results, imported the test results to a website called CTWEB and imported to a tool named Orion for further investigation.
* Did more research on new internal toolings which may apply for compiler area such as IBM Developer for System z, IBM Explorer for z/OS, IBM Fault Analyzer for z/OS, and IBM File Manager for z/OS. Gave presentations to other internal and external team members.
* Reviewed the documentation such as Language Reference and Programming Guide written by content designers, development plan by developers, and testing plans by testers.
* Improved the CTWEB page to better reflect the status of defects, testruns, machine info, etc.
* Cooperated with system admin to monitor and report any machine issues caused by exhausting the storage, spooling, high CPU consumption. Helped him purge the jobs if any.
* Designed test plan and developed new COBOL automated testcases for new compiler features by discussing with the compiler developers in agile process.
* Developed and maintained Perl and Shell scripts to better assist other members in terms of faster and more convenient testing.
* Maintained the existent test cases via a version control tool called CMVC, Updated testcases to reflect new compiler behavior.
* Investigated the failed test cases caused by the compiler, runtime, system, or testcase by reading dumps, investigating generated assemblers, swapping different versions of compiler/runtime component, and modifying the testcases, opened defects if necessary.
* Mentored and trained new employees on high-level testing for the compiler and debugger team.

**Software Developer**

IBM Canada, Markham, Ontario Oct 2013-Oct 2014

* Designed test plan and developed new COBOL, PL/I, and C/C++ automated testcases on z/OS for new debugger features.
* Investigated how to set up an automated test environment for testing the debugger on z/OS for COBOL, PL/I, and C/C++, AIX for COBOL, Linux for C/C++.
* Opened defects and reported the problems to developers.
* Trained intern students on how to test the debugger manually and automatically.

**Awards and Achievements**

IBM Manager’s Choice Award for IBM Canada 100th Years of Progress in Canada, Nov 2017

IBM Manager’s Choice Award for IBM Canada Lab 50th Years of Progress in Canada, Jun 2017

Concordia Research Fellowship, Concordia University, Canada,2010-2012

Third-class Scholarship, Dalian Nationalities University, China,2007-2009

**Publication**

[1]. B. C. M. Fung, Y. Jin, and J. Li. Preserving privacy and frequent sharing patterns for social network data publishing. In *Proceedings of the 5th IEEE/ACM International Conference on Social Networks Analysis and Mining (***ASONAM***)*, 7 pages, Niagara Falls, Canada: IEEE Computer Society, August 2013.

[2]. B. C. M. Fung, Y. Jin, J. Li, and J. Liu. [Recommendation and Search in Social Networks](https://dx.doi.org/10.1007/978-3-319-14379-8), chapter [Anonymizing social network data for maximal frequent-sharing pattern mining](http://doi.org/10.1007/978-3-319-14379-8_5). *Lecture Notes in Social Networks (***LNSN***)*, pages 77-100, February 2015. Springer.