Keefer T. Davies

Software Engineer

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SKILLS SUMMARY

- Dedicated team worker with an excellent work ethic and positive attitude
- Excellent background in object oriented programming and design
- Strong understanding of software architecture and design patterns
- Experience with the Software Development Life Cycle (SDLC) and Agile Methodologies (SCRUM)
- Exceptional analytical, time management, collaboration and problem-solving skills

COMPUTER PROFICIENCY

Languages:	Proficient in C/C++. Working knowledge of GoLang, C#, Java, JavaScript, PHP, Python, PowerShell and SQL.
Systems:	Windows 10, OS X, Debian Linux, Amazon Web Services (AWS), Kubernetes, Docker
Software:	Visual Studio, Eclipse, Xcode, Git, Subversion, Jenkins, Atlassian Suite, Google Analytics, Intel VTune, VMware Workstation, HyperV, Code Collaborator, Bugzilla, WinDbg
Other:	Universal Windows Platform (UWP), Google Test/Mock, Google Benchmark, Google Analytics, Apache, JUnit, AspectJ, Log4J, HTML, CSS, LaTeX

WORK EXPERIENCE

Software Engineer, McAfee LLC (formerly Intel Canada Inc.), Waterloo, ON, *July 2015 – current*

- Developed, maintained, reviewed and tested high-quality modern C++ code for McAfee's flagship product running on over 40 million endpoints.
- Played a lead role in the design and development of a message bus and module hosting framework that is being used as a platform to re-architect McAfee's core Windows products.
- Developed a UI framework that enabled a revolutionary user interface for McAfee's flagship product. This framework was based on the Chromium Embedded Framework and connects seamlessly with the message bus through custom extensions added the V8 JavaScript engine.
- Innovated in the Universal Windows Platform (UWP) space. Developed a discoverability protocol and communication protocol that enables secure communication between UWP applications and Win32 desktop applications. Patent pending.
- Took a lead role in the development of the McAfee Security UWP application which leveraged learnings from innovation projects to connect with McAfee's core security suite. This application was distributed through OEM channels and has been installed on over 2 million endpoints.
- Took ownership of a proprietary analytics stack developed to provide comprehensive real user data reporting for the McAfee True Key product. Gained exposure to GoLang, Kubernetes, Docker and Amazon Web Services.
- Assumed the role of performance champion responsible for profiling and benchmarking new/existing code and advocating for performance in architectural and design discussions.
- Developed a functional test framework for core platform pieces and libraries using Google Test.
- Performed Root Cause Analysis (RCA) using Visual Studio and WinDbg to analyze software crash dumps. Addressed numerous complex concurrency bugs.

Technologies: C/C++, C#, GoLang, JavaScript, PowerShell, Python, UWP, VTune, AWS, Kubernetes

FileMaker Software Engineer, Apple Inc., Ottawa, ON, *September – December 2014*

- Resolved production issues in FileMaker Pro 13, the top selling easy-to-use database software.
- Practiced cross-platform development, addressing numerous bugs on Windows and OS X. Efforts were focused on addressing bugs in Script Workspace, the flagship feature in FileMaker Pro 14 (2015 release).
- Re-engineered a custom text wrapping algorithm for the new Script Workspace developed with the Windows Presentation Foundation (WPF).
- Effectively communicated with fellow engineers locally and remotely. The Ottawa office is a small remote engineering office, most other FileMaker engineers are based out of California.

   Technologies: C/C++, WPF/C#, Cocoa/Objective-C, FileMaker Pro Advanced

Software Development Engineer, McAfee Inc., Waterloo, ON, *May – August 2013 & January – April 2014*

- Completed several research projects in the areas of custom user interface (UI) engines, telemetry and analytics.
- Resolved production issues in McAfee's Windows applications used by millions of customers.
- Managed McAfee's Jenkins Continuous Integration (CI) system, taking it from a proof of concept to a production level system with the help of one other co-op student.
- Implemented an automation framework with PHP and Jenkins to automate testing of the latest McAfee Stinger builds when integrated with McAfee's Windows application. This project greatly minimized manual effort and increased release frequency of the latest McAfee Stinger application.

   Technologies: C/C++, C#, Java, PowerShell, Python, PHP, SQL, SQLite, WinDbg, Jenkins and Jelly scripts

Software Developer, Research In Motion Limited, Waterloo, ON, *September – December 2012*

- Designed, developed and maintained automation testing frameworks, tests, systems and tools for BlackBerry® Enterprise Software.
- Analyzed and debugged automated test suites for BlackBerry 10, identifying root causes of failure and taking appropriate corrective actions.
- Implemented logging functionality for test suites with Apache Log4J and AspectJ.

   Technologies: C/C++, C#, Java, Python, Jenkins, Gerrit, QNX Momentics IDE, and Spring Tool Suite

EDUCATION

University of Waterloo (Waterloo, ON)
Bachelor of Software Engineering, 2010-2015

   School Projects:

- Procedurally Generated Transitional Audio, Capstone Design (May 2014 – April 2015)
     GitHub: *https://github.com/PGTA*
- ARM Based Operating System in C, Operating Systems (January – April 2013)
- Compiler for Subset of C++, Foundations of Sequential Programs (September – December 2011)

London Central Secondary School (London, ON)
Ontario High School Diploma, University Level, 2006-2010

AWARDS AND SCHOLARSHIPS

- *Sandford Fleming Foundation Award*, University of Waterloo, Waterloo, ON, December 2012 (for co-op work report)
- *Merit Scholarship*, University of Waterloo, Waterloo, ON, August 2010 (for high school admission average)
- *Ontario Scholar Certificate*, London Central Secondary School, London, ON, June 2010
- *Ontario Semifinalist*, ECOO Programming Competition, London, ON, April 2010
- *Certificate of Excellence*, University of Toronto, Toronto, ON, April 2009 (finalist in showCaSe: A Computer Science Fair 2009)
- *Ontario Semifinalist*, ECOO Programming Competition, London, ON, April 2009

References available upon request