

Profile

Software Engineer with over twelve years of cross-platform experience on a variety of hardware platforms and operating systems. A conscientious and detail-oriented team player, emphasizing quality and always interested in learning new technical skills and building new systems.

Skills

- C (2 years), C++ (11 years), C# (7 years)
- Visual Studio
- Perforce
- Jira, DevTrack
- WinForms, WPF
- Scrum
- Test-Driven Development
- Code Collaborator
- Windows, Linux, Unix, consoles
- Digital Electronics

Experience

Electronic Arts

Software Engineer II (Animation)

2003 - 2014

Member of a team of 20-30 engineers and animators maintaining and enhancing ANT, a proprietary character animation toolkit comprised of an artist-facing GUI application and a cross-platform, performance-critical video game runtime component. ANT is used in all Electronic Arts sports games and some games in other genres, such as Battlefield 4.

- Participated in all phases of development: Requirements gathering, estimation, scheduling, implementation, testing, debugging, support and refinement.
- Assisted with user support via email, instant messaging, phone and in person, and aided game teams in integrating new versions of ANT with their games.
- Mentored several junior engineers and co-op students.
- Designed and implemented a data-driven test framework that simplified and accelerated the process of creating regression tests and enabled non-engineers to create tests, resulting in both time savings and an increase in test coverage.
- Created an interactive animation demo that was a hit at an internal conference and later served as both a performance test and a systems integration test.
- Took over ownership and maintenance of ANT's input device systems, including joystick, keyboard and mouse interfacing plus the input replay system used for testing.
- Interfaced ANT with the Microsoft Kinect motion sensor and created a visual environment for defining gestures. This enabled artists to create gestures in minutes, versus potentially hours to days of an engineer's time implementing them in code.
- Developed and owned ANT's camera animation features, including prototyping a graph-based procedural animation system that was later expanded due to popularity.
- Contributed to several workflow improvement and legacy system refactoring projects.

Radical Entertainment

Tools & Libraries Programmer (*Internship*)

Sep - Dec 2001

Part of a small team developing in-house, portable code libraries abstracting system functionality across multiple video game platforms.

- Maintained a cross-platform file system I/O library.
- Developed and maintained profiling and debugging tools.
- Conducted an investigation of file system performance bottlenecks on video game consoles and presented results to senior engineers. This resulted in a 50% improvement in level load times for the X-Box version of Simpsons Road Rage.

Realcase Software Research Corp.

Research Programmer (*Contract*)

1999 - 2000

Led a team of four C programmers to design, implement and deliver an Internet-scalable, multi-platform distributed build system. It consisted of a client and three different server programs and ran on thirteen platforms (multiple versions of Unix, Linux and Windows), and was used both by customers and in-house as a routine part of the development process.

Other Past Experience

Teaching Assistant at Simon Fraser University	2002
Computer Lab Administrator at Simon Fraser University	2002
IT Technician at Mount Royal University	1995
Peer Tutor at Mount Royal University	1995

Education

Master's Degree in Computing Science, Simon Fraser University	2003
Bachelor's Degree in Computer Science, University of Calgary	1998
Diploma in Computer Science, Mount Royal University	1996
Diploma in Electronics Engineering Technology, George Brown College	1991

Other Professional Development

Embedded Systems: Shape the World, EDX	2015
Programming Mobile Applications for Android Handhelds, Coursera	2015
Introduction to Interactive Programming in Python, Coursera	2015
Think Again: How to Reason and Argue, Coursera	2015
Introduction to Digital Sound Design, Coursera	2013
Design: Creation of Artifacts in Society, Coursera	2012
Introduction to 68000 Series Microprocessors, George Brown College	1990
Digital Equipment & Microprocessor Systems, George Brown College	1989