

JAAP SUTER

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Canada

EXPERIENCE

Capcom - Burnaby, Canada

July 2013 - June 2014

Senior Performance and Concurrency Engineer.

- Brought onto the Dead Rising 3 project for a performance investigation deep dive. Discovered significant under-utilization of hardware due to lack of concurrency awareness. Contributed major optimizations through parallelization of CPU intensive code.
- Developed the core task management and concurrency runtime library for all of Capcom's future titles. Inspired by Microsoft's PPL and Intel's TBB, but with a few game-development specific twists. Helped raise awareness of concurrency and parallelism through several articles and talks.

AirG - Vancouver, Canada

December 2012 - June 2013

Android Developer, worked on Hookt, a mobile messaging application.

Sabbatical - Vancouver, Canada

April 2011 - November 2012

Happy Hobby Hacker.

- Build a simple [Structured Light 3D Scanner](#) in C#, using a projector and camera. Streamlined the camera calibration process using fringe patterns on a monitor rather than the commonly used checkerboard patterns.
- Experimenting with a custom [CLR host](#) and custom [C#/C++ interop layer](#) to allow use of DirectX 11 alongside .NET's Async Await
- Played with a number of web front-end technologies while building [a new website](#) (not live, see dev-branch on Github), learning Ruby, Coffeescript, Sass.

Electronic Arts - Burnaby, Canada

November 2005 - April 2011

Technical Director for Core & Infrastructure.

- Responsible for the core runtime libraries used by nearly all EA games on all platforms, a variety of tools used by artists, QA, and producers at different EA studios worldwide, and the entire stack of package distribution, configuration management, and project build technologies necessary for effective sharing of cross-platform technology.
- Initiated and developed large parts of the EASharp project, allowing C# programming for game consoles (PS3, X360, Wii) through an MSIL to [LLVM](#) compiler, targeting a custom in-house developed .NET runtime.
- Helped design, build and maintain Job Manager - the company wide solution for task parallelism.
- Drove the mobile strategy for EA central technology, ported base libraries to iPhone/iOS, added Xcode support to build infrastructure, initiated Android, WebOS, and BlackBerry development.

Next Level Games - Vancouver, Canada

October 2004 - October 2005

Senior Software Engineer on the Super Mario Strikers team.

Electronic Arts - Burnaby, Canada

September 2002 - September 2004

Software Engineer and Xbox SKU lead on the Fifa team.

Overloaded Games - Amsterdam, The Netherlands

March 2002 - September 2002

Principal Software Engineer on three PocketPC & Symbian games.

Davilex Games - Houten, The Netherlands

September 1999 - January 2002

Software Engineer in the R&D department.

EDUCATION

Twente University, Enschede, The Netherlands

September 1998 - September 2002

B.Sc. in Computer Science

SKILLS

- Strong and well-rounded software engineer, delivers quality and elegance.
- Not afraid of math.
- Comfortable multi-paradigm programmer, be it object oriented, generic, functional, meta or generative programming.
- Strong advocate of test driven, agile and common sense development.
- Proven track record architecting and maintaining physical aspects of large scale multi-language cross-platform projects.
- Very comfortable with concurrency/parallelism, and solid experience designing portable multi-core architectures.
- Expert C++ programmer, comfortable with the STL, Boost, and C++ 11.
- Expert C# programmer, experienced with Linq, and Reactive Extensions, and Async Await.
- Experienced C and assembly programmer, comfortable writing code for embedded devices with limited memory and performance.
- Dabbles in: Ruby, Coffeescript, Python, Java, x86/64, ARM/Neon and SPU Assembly.
- Platform experience: Win32/64, Xbox One, PS3 (PPU/SPU), Android, iPhone, Wii, PS2, Gamecube, GBA

PUBLICATIONS

Suter J. (2003) - *Geometric Algebra Primer* - Introduction to Clifford Algebra, available online at <http://www.jaapsuter.com/geometric-algebra/>.

CREDITS

Dead Rising 3 (2014)

FIFA Soccer 2005 (2004)

Snowboard Jam (2002)

Burnout Paradise (2009)

UEFA Euro 2004 (2004)

Nim & Lost Garden (2002)

NBA Street (2007)

FIFA Soccer 2004 (2003)

Magnets (2002)

NFS: Carbon (2006)

The Sims Bustin' Out (2003)

US Racer (2002)

Super Mario Strikers (2005)

US Racer (2002)

DaviTuin/Woon 3D (2000)