

JAAP SUTER

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1738 Parker Street
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Canada

EXPERIENCE

Sabbatical - Vancouver, Canada

April 2011 - Present

- Experimenting with a custom [CLR host](#) and [custom C#/C++ interop layer](#) to allow use of DirectX 11 alongside .NET's Async Await, without compromising framerate or input latency.
- Developing a camera calibration method that uses fringe patterns on a flat-screen monitor rather than checkerboard shots to streamline the process.
- Build a simple [Structured Light 3D Scanner](#) in C# (*XNA, Emgu, and DirectShow*) using a projector and camera.

Electronic Arts - Burnaby, Canada

November 2004 - 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.

Alongside, major initiatives included:

- Drove the mobile strategy for central technology, porting a majority of our base libraries to iPhone/iOS, porting our build infrastructure to support Mac OSX and Xcode development, and ensuring Android, WebOS, and others got similar attention.
- Created the EASharp project, allowing C# programming for game consoles (PS3, X360, Wii). Wrote the ahead-of-time MSIL to [LLVM](#) compiler, targeting a custom .NET runtime. Build a C# to Console toolchain around it, ported the [Boehm collector](#), replaced it with a custom garbage collector, and ported the initial subset of the Base Class Libraries.
- Job Manager.

Next Level Games - Vancouver, Canada

October 2004 - October 2005

Senior Software Engineer, member of the Super Mario Strikers team. Responsible for the architecture, design and implementation of major subsystems and guidance and mentoring of junior engineers.

Electronic Arts - Burnaby, Canada

September 2002 - September 2004

Software engineer, part of the Fifa team, responsible for many aspects of several games, including databases, rendering, Xbox SKUs, artist tools, and more.

Overloaded Games - Amsterdam, The Netherlands

March 2002 - September 2002

Principal software engineer on three PocketPC & Symbian games, as well as main contributor to the *MobileCore* base libraries on which these games were built.

Davilex Games - Houten, The Netherlands

September 1999 - January 2002

Software Engineer in the R&D department, wrote the software rasterizer and 3D engine used in garden and interior design products, and the end-to-end lighting pipeline for several racing games.

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.
- Demonstrated ability to lead and mentor other engineers
- 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++0x.
- 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: Python, Java, Lisp, ARM/Neon and SPU Assembly.
- Platform experience: Win32/64, PS3 (PPU/SPU), Xbox 360, Wii, iPhone, Xbox, PS2, Gamecube, GBA

PUBLICATIONS

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

CREDITS

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)	Wonen (2000)
FIFA Soccer 2005 (2004)	Snowboard Jam (2002)	DaviTuin 3D (2000)