

# JAAP SUTER

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## CONTACT

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## EXPERIENCE

**Sabbatical**, Vancouver, Canada

**April 2011 - Present**

Wrote my own structured light 3D scanner using a projector and a webcam. Implementing a stream-lined camera calibration mechanism using graycode and fringe patterns on an LCD monitor. Experimenting with a custom C#/C++ managed to native interop layer.

**Electronic Arts**, Burnaby, Canada

**November 2004 - April 2011**

Technical director on the Infrastructure team of EA Tech, the central technology department of EA Worldwide. Responsibilities include the direction, design, development and support for a multitude of core game technologies with a team of fifteen people.

Lead of the iPhone platform. Work here has included the initial port of EA's central technology to the platform, and includes ongoing support and education for a variety of internal and external game team

.NET (C#) runtime for game consoles (PS3, X360, Wii). Includes the implementation of the base class libraries, various runtime support, and an LLVM-based compiler for ahead-of-time compilation. I primarily wrote the garbage collector, and the C++ interop layer, and also wrote a large portion of the compiler.

**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.
- Expert knowledge on many programming paradigms including object oriented, generic, functional, meta and 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 projects.
- Expert C++ programmer, comfortable with the STL, Boost, and C++0x.
- Expert C# programmer, experienced with Linq, Async Await, and Reactive Extensions.
- Experienced C and assembly programmer, comfortable writing code for embedded devices with limited memory and performance.
- Other languages (experience varies): Python, Java, Lisp, ARM/Neon and SPU Assembly.
- High level of interest in math in all its forms.
- Experience with: Win32/64, PS3 (PPU/SPU), Xbox 360, Wii, iPhone, Xbox, PS2, Gamecube, GBA

## PUBLICATIONS

Jaap Suter. *Geometric Algebra Primer*. <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)       |