*Over fifteen years as a technology lead in building AAA and free-to-play games, simulation engines and tools.*

*My teams value my ability to provide a better, faster development environment, a vision that unifies the creative, technical and business requirements, and a tangible, adaptive path to get there.*

*Career summary, pre-games: fifteen years in distributed systems*, starting as a programmer and growing into computer scientist, branch manager and business development roles across several Canadian and American government research labs, startups and contracting groups.

*Game industry summary*: In 2000, I switched to online games, starting with six months at Orcus, a platform startup. Orcus died in the .com crash; I spent the next three years at Electronic Arts, starting as the simulation lead engineer in The Sims Online. I also helped drive new engineering practices in TSO and The Sims 2.0. I then rejoined the startup world for several projects of my own. The biggest was 2.5 years spent funding and growing Emergent Game Technologies, another MMO platform. At KIXEYE (2 years) I started as Systems Performance Manager, driving improvements in that startup’s product quality and engineering efficiency.

*Currently: I am Senior Director of Development at Good Game Studios*, doing development acceleration work. I also ran two cancelled titles at GGS (AAA, F2P combat on Unreal; RTS with squad-based combat on Unity).

Highlighted experience in games and platforms

* *Electronic Arts (production acceleration in The Sims franchise)*: simulation engine lead, metrics lead and automated testing lead (The Sims Online); built and led an automation team for Maxis and The Sims 2.0.
* *KIXEYE*: built and led the performance test teams, client and server, for all Facebook, Unity and mobile games. Technology director for load testing, client testing and QA/QE tools.
* *Jade Simulations*: first employee for this startup, coding early supercomputer and network engines, while also supporting business development & marketing.
* *Emergent Game Technologies*: co-founder, architect & fund raising roles. The target was a platform (tools, engines, processes & services) to scale MMO game development. Grew from three people to over seventy.
* *Industry work*: over twenty conference lectures, in game development, parallel computing and scaling advanced distributed training simulations. Co-authored a textbook for online games. I’ve helped introduce advanced engineering into games: [auto-test](http://maggotranch.com/Accelerating_Game_Development.pptx) & [metrics](http://maggotranch.com/MMO_Metrics.pdf).
* *C/C++ lead programmer:* online games and commercial parallel simulation engines.

# Leadership experience

* *Cross-team communication skills* from years of working in research labs, engine companies, game development teams, quality assurance teams and business development teams allow seamless translation between design requirements, technology options, and business implications.
* *Created new offices and new teams*, in both startups and established corporations.
* *Ran and mentored engineering teams* using SCRUM, metrics-driven and test-driven development and other Agile, Lean and XP techniques. Helped drive process improvement on every project since 1989.
* *System architect for DARPA (the research branch of the US military):* Synthetic Theater of War and Advanced Distributed Simulation projects that introduced scaling and integration standards for aggregating training simulations into shared virtual worlds for large-scale exercises.

# My Objectives

* *A leadership role, fielding games and/or platforms,* where I have strong influence over how the product is built and tested and some influence over product requirements. I especially seek mentoring and force multiplier roles that can affect the entire team.
* *My passion is building amazing products, with other passion-driven people, using top-notch production techniques. I joined the game industry to have fun with my job again; to solve new problems, on the fly, with rapid, iterative development*. Rapid iteration, backed by constant testing, not only help teams build a better game, but also accelerates development and aids the innovation process.

**Good Game Studios: September 2015 – current**

*Started: Engineering Director (Unity/mobile) & promoted to Senior Director of Development (Unreal/Steam)*

I was one of the major factors in straightening out the largest, most chaotic project in the company, the AAA, free-to-play studio (70+ people). *I made major improvements in production speed, product quality and team morale*. The CEO was impressed enough to next let me pick my own team and define my own project, asking that I “find a way to have the same force multiplier effect that I had on the 4th Floor studio, at the company level.” We are doing a series of Lean Game Factories; platforms and processes for multiple genres of free-to-play games. *The Lean Factories are designed around Deming’s Theory; an increased focus on product quality, achieved by improving the production process, results in both greater customer satisfaction and lower production costs.* We design for speed in the architecture, add automation and metrics, and then iteratively optimize both the game and the production processes (a Kaizen/Muda approach). This approach supports all three phases of development: rapid prototyping speed, production speed and lower recurring costs when live. We also prototyped a *simulation sandbox engine for MMOs; think The Sims, with Guns, in an RTS*. I was one of the leads in two, top-priority strike teams: server scalability and production efficiency improvements for a puzzler game going global.

**KIXEYE: August 2012 – August 2014**

# *Started: Manager (Systems Performance Group) & promoted to Manager (Quality Engineering Group)*

KIXEYE was having trouble scaling its software development and was willing to try my new performance-driven development theories on all new and existing titles. This turned out to be both very difficult and very exciting!

*We provided the executive team with their best ever view of the true cost, risk and schedule drivers of all titles; they began to rely heavily on load test results to measure and accelerate progress, increase server uptime and extend the definition of quality*. Major improvements in development time, scalability and operational cost/quality were directly attributed to load testing. I trained a young engineering team in how to build scalable testing systems and study system performance of both the server and the client. We provided reliable metrics, automatically, for all engineering, QA and executive teams, company-wide. Titles included: War Commander, Battle Pirates, Vega Conflict, TOME, WC: Rogue Assault, BYM:U.

# **Self-Employed: Writer and Consultant**

*July 2008 – July 2012; August 2014 to February 2015*

Consulting: I did seminars on automated testing and metrics in agile development for companies such as Apple and Bioware. Writing: I dedicated considerable time to trying to define and fund my passions: first to improve the game development process such that we can innovate more in games, and secondly, to explore emergent storytelling via sandbox simulations.This gave me the draft of a new textbook for Iterative Innovation: *engineering tactics to radically improve iteration rates time and quality levels, while also lowering costs and risks, and thus allowing more innovation. I make heavy use of automation, performance testing, results aggregation and play testing.* *This was also a strategic investment to get my skills to the level where I can make high-end contributions to the creative processes critical to creating hit games, the development processes to scale them and the business framework those must fit in.* I was unable to fund my sandbox-storytelling project, but KIXEYE, above, was very interested in my new engineering approach, as described above.

**Emergent Game Technologies: January 2005 – June 2007**

# *Started: Senior Development Director & promoted to VP (Engineering)*

A platform startup that targeted massively multi-player games. I held business planning and system architecture roles, and was one of the three executive leads for fundraising and business development across the USA, Korea and China, acquiring over $10 million in VC funding. We grew from three people to over seventy people. My customer-facing roles included developing test-driven production models, technology evangelist (writing white papers, conference lectures, customer briefings) and engineering roadmaps. I did all technology pitches to both prospective customers and investors.

**Automation Corporation: July 2004 – January 2005**

# *Founder: System Architect, Business Development*

Following the success of the automated test and measure systems I created for EA, described below, I left to pursue a market opportunity: production and scalability problems across the online games industry. This fed into EGT, described above.

**Electronic Arts, Maxis Studio: June 2001–July 2004**

# *Started: Software Engineer III & promoted to Associate Development Director*

I was one of the leads in accelerating the development speed and product stability of EA's flagship MMO title, *The Sims Online*. *Our new systems proved so effective that TSO’s entire production focus shifted to revolve around automated testing, taking months off of the schedule.* I built a parallel team to field my automation-based development strategy, while also rebuilding the simulation for client/server execution. *Continuing this automation work became a top studio priority. I then built the first cross-project tools team at Maxis, and proved out the new system in The Sims 2.0*.

Focusing on ease of use, reliability and speed was key to the success of the tools. Robbie, the friendly face of the automation system, became a verb within weeks of introduction; the real-time metrics Dashboard provided aggregated views of player behavior and performance per module, and thus aiding in accurate milestone projections. *My background in user interfaces, tools and coding took our toolkit to a level that was rated “light years ahead of the other studios” by a central EA survey. I learned that a good tool chain had a tremendous effect on the productivity and happiness of the team*. A vivid memory is of a stranger stopping me in the hall one day and saying, “I just wanted to thank you for making the pain go away.”

**Orcus 3D Inc.: August 2000 – February 2001**

# *Senior Software Architect*

A platform startup that targeted MMO games, my role was scalability and load balancing within and across clusters. I also contributed to marketing work and the business plan. We could not get full funding during the .com crash.

**Science Applications International Corporation (SAIC): 1993 - 2000**

# *Started: Senior Software Engineer & promoted twice (Senior Computer Scientist, Branch Manager)*

Lead architect and principle investigator for DARPA’s *Advanced Distributed Simulation* and *Advanced Simulation Technology Thrust* projects; we helped standardize scalability techniques such as interest management and predictive contracts, and prototyped a tightly coupled clustered computing approach for scaling virtual training worlds. We evangelized industry-wide standards for interoperability at the engineer/architect/executive levels. I also filled system architect, co-lead presenter and technical writer roles for business development, winning contracts such as the *Synthetic Theater of War,* a fifty million dollar contract to field immersive worlds for training simulations by integrating the results of dozens of research projects,and the *HLA RTI 2.0,* a network engine that became the standard for integrating military simulations.

**Jade Simulations: 1988 - 1993**

# *Started: System Programmer & promoted twice (Technology Evangelist, Branch Manager)*

I built transport layers for our simulation engine across new types of supercomputers and clustered computers, as well as some of the earliest automated testing tools. We took an academic research project and turned it into a high quality, high performance parallel simulation engine. I worked with our national lab users to plan and code new systems, such as checkpoint/restart extensions to the Unix kernel for clustered computing. I taught Jade’s training courses for object-oriented design, multi-threaded code design and large-scale software development. I took on business development responsibilities when I opened our office in Washington, D.C, working with potential customers at executive and technical director levels.

**University of Calgary and Alberta Research Council: 1983 – 1988**

# *Research Programmer, Tutor*

*I worked my way through school as a programmer for various research groups, and by tutoring other undergraduates*. I built UNIX device drivers in C/assembly, Macintosh group communication tools and programmer tools. Our research groups were leaders in distributed systems, object-oriented languages, simulation and learning systems. *For fun, we’d use the super-computers to build our own multi-player games.*

# **Education:**

1989: B.Sc. University of Calgary, taking minors in ancient history, modern dance and English literature.

1990, 1994: Master’s coursework on parallel simulation & massively parallel computer architectures. My mini-thesis was a distributed education system, implemented with an experimental skeleton-programming model.

**Outside of work:**

I am basically a bookworm, learning junkie type. Writing helps me think about and master a topic, so I write a lot on the game development process. I also work on short stories, alternate history books and emergent story-telling game designs (*sandbox storytelling is my long-term dream*).

I have travelled around the world by competing in international sports (rugby, wrestling and ultimate frisbee). This taught me the basics of how to win as a team, and by adding captain / coach roles, I also grew as a leader. I have led several community improvement initiatives. I now focus mainly on Tai Chi, garden design and cycling.

**Relocation and requirements data:**

I am Canadian, with permanent resident status in the USA (Green Card status), currently working in Hamburg Germany. I’ve worked in Canada, Washington D.C., San Francisco and Los Angeles. Global relocation is fine.