

## Introduction

Senior Software Engineer with 15 years at startups, Microsoft, AT&T, and Disney. Broad experience creating high-performance code for consumer electronics, including hardware bring-up, firmware, game engines, and video streaming.

Seeking senior role in wearable computing, embedded, graphics, computer vision.

<http://www.seankelleher.org>

## Skills

Mobile and embedded software architecture.  
2D / 3D graphics and games.  
Real-time, OS internals, threads, bare metal, USB, SPI, I2C, logic analyzers.  
C, C++, Objective-C, OpenGL, assembly language, PERL, Python.

## Experience

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<b>Principal Software Engineer</b> <b>Exo Labs</b>	<b>2013 - Current</b> <b>Seattle, WA</b>
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Software engineer #2 at a hardware startup. We make video cameras that work with iPad, and featured in Apple's "30 Years of Mac" commercial.

Owned software architecture across multiple devices. Optimized the founder's v1 firmware and mobile app for 10x performance gain. (Objective-C, OpenGL, bare-metal C on Cortex-M3)

Owned firmware, firmware update, device drivers, low-latency video streaming and rendering, Apple MFi certification, and computer vision research.

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<b>Senior Software Engineer</b> <b>Walt Disney Company</b>	<b>2011 - 2012</b> <b>Redmond, WA</b>
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Owned the graphics architecture for Club Penguin virtual world on iPad. 2D / 3D with skeletal animation. Supervised a junior developer. (C++ / OpenGL)

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<b>Sole Proprietor</b> <b>Chinstrap Games</b>	<b>2011 - 2012</b> <b>Seattle, WA</b>
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Developed a 5-star casual game for iOS on custom game engine (C++ / OpenGL).

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<b>Software Development Engineer</b> <b>Microsoft – Windows CE</b>	<b>2003 - 2010</b> <b>Redmond, WA</b>
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Porting embedded OS to new hardware, with a later focus on graphics.

- Received Gold Star (Microsoft's top award).
- Convinced team to embrace OpenGL. Wrote code to dramatically accelerate Silverlight and Internet Explorer on embedded systems.

- Contributed to BSPs, drivers, boot loaders, cellular stack, debugger.
- Hired and supervised contractors and an intern.

**Sabbatical** **2002**

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Studied software engineering at University of Washington. Researched operating systems and wrote a small OS for fun. Backpacked across Europe.

**Embedded Software Engineer** **2000 - 2001**  
**AT&T Wireless** **Redmond, WA**

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Wrote firmware for cell towers.

- Over-the-air firmware upgrade.
- Remote configuration, telemetry for multiprocessor systems.

**Software Developer II** **1999 - 2000**  
**AT&T Wireless** **Redmond, WA**

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Owned Java client for national call center application.

- Awarded several bonuses, ranked "role model" on annual review.
- Dev lead while the primary lead took medical leave. Promoted to Developer II.

**Data Center Operations Lead** **1998 - 1999**  
**AT&T Wireless** **Bothell, WA**

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Ensured 99.999% uptime of customer care, billing and fraud detection.

- Promoted to lead after 4 months; supervised 3 people.
- Coordinated outage response across 5 teams; contact for senior directors.
- Ranked "role model" on annual review.

## Education

**Machine Learning Certificate** **2014**  
**Coursera**

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**iOS Programming Certificate** **2010 - 2011**  
**University of Washington**

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**Game Development Certificate** **2007 - 2008**  
**University of Washington**

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**Embedded and Real-Time Systems Certificate** **2002 - 2003**  
**University of Washington**

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**Computer Science** **1993-1997**  
**University of Montana**

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Four years towards B.Sc. degree (incomplete).