

# Gregory Ray

Senior Software Engineer – Bay Area, CA

## Core Skills

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### Leadership:

Cofounder of three companies, latest (2012-16) was VC backed \$5m, led engineering as CTO. Scrum Alliance Certified Scrum Leader. Landmark.

### Software as a Craft:

Practicing pragmatic software craftsmanship for over 14 years. Language agnostic. Passionate. Better tools and working smarter over harder.

### UI/UX Magic Moments:

Led team of Riddim Ribbon, iOS game, which was App Store top grossing Sept 2010 and selected by Steve Jobs to be featured in Apple fall keynote 2009.

## Technology Highlights

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### Languages:

Javascript/ES6, Node.JS, Electron, Go, C/C++, Java/JSP, Objective-C, Python, HTML5, CSS, Ruby/Rails, OpenGL

### Tools:

GDB, MongoDB, MySQL, Git, SVN, Shell, FFMPEG, vi, Xcode, NPM, LaTeX, Eclipse, Trac, Jira, Hex-Rays IDA, MATLAB

### Beyond:

HTTP2/Quic, REST, Android (SDK, NDK, HAL), Machine Learning / Regression Analysis, MPEG-2, Codecs, SSL, Crypto/InfoSec

## Experience

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Apr 2016 – Nov 2017

eyeIO

Palo Alto, CA

### Head of Hardware

- Created working HDMI-CEC driver and Android HAL for RockChip SoC television set top box. This removed the requirement to ship STB with remote control and reduced manufacturing cost by \$500k.
- Implemented and maintained custom Linux Kernel, U-Boot + Arm TrustZone TEE and Android Lollipop 5.1.1 for RK3188 SoC-based television Set Top Box.
- Created Quic/HTTP2 zero-jitter MPEG Transport Stream muxer/router for linear (live) TV, low latency requirement (<5ms). Used to re-establish emergency television in Mexico after 2017 earthquake and in Puerto Rico post Hurricane Maria

Jan 2013 – Apr 2016

Ever Adventure

London, UK

### Co-Founder / CTO

- Created / maintained our centralized secure linear-feedback shift register RNG based on Mersenne Twister for real money online slot machines. It passed compliance testing conducted by NMI and allowing company to obtain prestigious UK Gambling License.
- Created initial 5 HTML5 slot machine games. Gambling license required rigorous and time-consuming 7-page math proofs modeling average return-to-player (RTP) payouts for each game. To eliminate this overhead I crafted an NPM module that read in the game configuration and used LaTeX to generate PDFs with math proofs, found satisfactory for regulatory compliance. This reduced time-to-market by several weeks per game title.
- At height of company these games were generating £1.5m a month.

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Feb 2008 – Sep 2010

SeekMobile → Tapulous → Disney Interactive

Palo Alto, CA

### Senior Software Engineer

- In November 2007 I started authoring an 3D game-engine for iPhone, named SeekTech, there was nothing else like it on the market at the time.
  - Tapulous and will.i.am (black eyed peas) approached with a novel game design, called Riddim Ribbon. They negotiated to license SeekTech and contract my team to build the full game from scratch.
  - Apple wishing to demonstrate the gaming capabilities of their new mobile phone approached Tapulous with opportunity to demo Riddim Ribbon, now nearly finish, in their Fall 2009 keynote. Steve Jobs reviewed the game on weekly-basis leading up to event, providing (mostly harsh) feedback and finally gave the green light just 1-day prior to event. Needless to say this had a profound impact on my life, I continued to work full-time at Tapulous which 9-months later was acquired by the Walt Disney Company.
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Mar 2007 – Feb 2008

OEM.com

Salt Lake City, UT

### Co-Founder / CTO

- Joined company, which at that time was DesignWin, as a contractor to build an electronic components sourcing platform in Ruby on Rails. After learning that the major shortcoming of DesignWin was lack of brand recognition, although outside the scope of my contract, I approached the CEO with a plan to rebrand company using a generic domain name which, in theory, would solve the brand recognition. I reached out to OEM.com domain owner and negotiated to use the domain with no upfront cost and they even invested in the company. I was then asked to join as co-founder and CTO.
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Mar 2007 – Jun 2007

Franklin Covey

Salt Lake City, UT

### Software Engineer

- Hired as RoR engineer to assist in globalization of Franklin Coveys time tracking and organization planner.
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Jul 2006 – Mar 2007

Podfitness.com

Salt Lake City, UT

### Software Engineer

- My first 9-to-5 engineering job doing RoR and front-end development for a fitness product on the pre-touch iPod. We made software that weaved celebrity personal trainer workouts to the music found on device with intensity that progressed as users fitness level increased. This began my obsession with Apple hardware and would later prove to be instrumental in shaping my career.
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Jun 2004 – Jul 2006

Fusion Creations

Salt Lake City, UT

### Co-founder

- Started consultancy company to pay way through college, however had to dropout after becoming the sole tech provider for a new planned community / municipality, Eagle Mountain City, UT (subsequently provided services for several large home developers inside the community as well).
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