

## WORK EXPERIENCE

### Staff Engineer | Lumos Labs | November 2017 - present

I served as a Staff Engineer on the games team, which is responsible for making cognitive training games.

- Worked on a variety of game features using C# and JS, using Unity and Cocos Creator
- prototyped numerous game ideas (mainly JS / canvas)
- developed and open-sourced a lightweight JS-based game engine for rapid prototyping (stirling.js)
- developed content pipeline tools using Python and JS

### Software Engineer | Google | October 2016 - November 2017

I worked as a web developer on real-time chat applications, including both Hangouts and Hangouts Chat. I built features and fixed bugs using a variety of javascript and java as well as a range of Google technologies.

### Founder/President | Jamwix | May 2013 - July 2016

Cofounder / president of Jamwix, a media startup focused on making high-quality games and experiences based on creativity and playfulness.

- Designed client architecture for CineMagic: Hollywood Madness, a match-three/collectible card game mashup for iOS and Android
- Implemented game systems using Haxe / OpenFL
- Created art pipeline tools in Python and Javascript to prep art assets for CineMagic
- Implemented UI for the first feature-length film released for virtual reality (Banshee Chapter: Oculus Rift Edition, Halloween 2014) using C++ / SDL
- Implemented parody versions of Reddit, Youtube, Imgur, and the Huffington Post as part of the "Reddit3016", a satirical look at what the internet might look like in 3016 (<http://reddit3016.com/>).
- Created a demo (using Unreal) of a virtual reality content aggregation system which was shown as part of the VR Village at SIGGRAPH 2016

### Lead Gameplay Engineer | KIXEYE | August 2011-May 2013

I joined KIXEYE just before War Commander launched, and helped to grow it into a top-rated strategy game on Facebook with 100k daily active users.

- Managed a team of 9 client developers
- Provided technical designs for numerous game systems
- Implemented numerous game systems spanning all aspects of the game using AS3 and C++
- Released new features and bug fixes on a two-week release schedule
- Worked with server teams to add a persistent world map to the game post-launch
- Worked with server teams to add synchronous PvP combat to the game post-launch

### Senior Software Engineer | Cull.tv | January 2011-June 2011

Worked on both front-end (JS, jQuery) and back-end (PHP, MySQL, Node.js) development for Cull, a social video site.

- Used the Facebook API to create a channel of videos from videos posted by people in your social network
- Implemented a system to collect feedback from users on new features
- Implemented playback controls and user interface elements using JS / jQuery

### Senior Software Engineer, Playstation Home | Sony Computer Entertainment, America | September 2008-January 2011

I was a member of the PlayStation Home Product Development team, which was responsible for creating levels, games, and virtual items for PlayStation Home.

- Designed a wide range of games and interactive experiences
- Implemented a wide range games using Lua and the Home SDK
- Designed a large-scale system to support rapid deployment of gameplay elements
- Designed a system to allow non-engineers to quickly and easily author narrative-based gameplay in Home
- Designed one of the most highly-trafficked levels in Home (the Playground)

## ABOUT

I'm a highly skilled generalist, at my best when working with others to deliver amazing experiences.

## PUBLICATIONS

### Maya Programming with Python Cookbook

PACKT Publishing, July 2016

## SKILLS

Gameplay Engineering, Javascript, Node.js, C#, C++, OpenGL, MySQL, Maya, Lua, Python, Unreal, Unity, Mentorship, Game Design

## EDUCATION

**MFA Arts, Computation, Engineering**  
University of California, Irvine.  
2003-2005

**BFA, Time-based and Electronic Media**  
Carnegie Mellon University, 1997-2001  
Served as a TA for Randy Pausch's "Building Virtual Worlds" class

## **Software Developer | Millions of Us | January 2008-June 2008**

I served in the engineering department of a small agency specializing in created branded experiences in virtual worlds and new media

- Created interactive experiences in several different platforms, including web-based ARGs and consoles
- Implemented arcade games and interactive objects in Playstation Home using Lua
- Designed and implemented (in Flash) the final puzzle for the Terminator: Dark Discovery ARG (official Honoree, 2009 Webby awards)

## **Web Developer | Linden Lab | November 2006-January 2008**

I worked as a web developer in the Creative Services team.

- Developed numerous internal web applications to make company processes more efficient and easier/more pleasant to use
- Personally responsible for significant components of internal infrastructure

## **Instructor | Academy of Art University | January 2003-May 2007, February 2010-December 2011, January-May 2016**

I've worked at AAU as an instructor in the 3d animation, New Media, and Game Programming departments, teaching both undergrads and graduate students.

- Taught classes in game programming with C++
- Taught classes on web technologies (JS, MySQL, PHP, HTML, CSS)
- Taught classes on various aspects of Maya and MEL scripting
- Created materials for online classes
- Served as an advisor for master's degree students

## **Virtual World Developer | Eldervision | May 1999-January 2001**

Created objects, environments, and animations both pre-rendered and real-time, for use in an 3d internet application for the elderly.