

Professional Experience

Flippfly Games **Contract Programmer** **2016**

- Unannounced Unity3D projects with the new TVOS platform for AppleTV.

Activision | Blizzard - Raven Software **SDE Intern** **Summer 2015**

- Call of Duty Online Major Mode Gameplay Team; Polished existing game modes and prototyped new ones.
- Owned an engine internal tool to visualize weapon attachments. (C++)
- Optimized game critical systems and ported features from previous projects. (C++, C-like scripting)
- Developed a variant of the most popular PVE game mode. (C-like scripting)

Amazon.com - Amazon Web Services **SDE Intern** **Summer 2014**

- Architected a "big data" scale metadata gathering and extraction service. (Java, Python, Bash, Javascript)
- Built a pipeline to gather millions of webpages, train, and tune datasets for machine learning analysis.
- 58% more accurate in some localizations; Overall 4% more accurate than leading competitors.

Mobile Learning Incubator **Game Dev. Intern** **Summer 2013**

- Open source iOS plant identification platform; Deployed to groups of ~100 students. (Objective-C)
- Open source iOS audio cropper tool; Integrated into existing Augmented Reality Game codebase. (Objective-C)

Selected Games&Projects

Monologue@Trainjam **2015**

- Typing game in html5/js with dynamic phrase generation; Built on a train ride from Chi to San Fran.
- Featured at GDC, Gamejolt, Offworld, and Vsauce3. >90k Plays. gamejolt.com/games/monologue/56005

Interactive Dance Environment@BoilerMake 2014 **2014**

- Award-winning hands-free "dance-to-code" programming IDE; C# and Unity3D, Kinect and Leap Motion APIs.

Minecraft Mod: RPG, Farming, & Pizza **2014**

- Decompiled engine source and used Java/ForgeAPI to hack in gameplay features.

Mosh Ball: Computer Graphics Project **2013**

- Arena ball game made with a partner using C++, OpenGL, and Box2d for Physics.
- Gooch Shaders, Perlin Noise Shaders, Dynamic Shadows.

Pacemaker@Global Game Jam 2013 **2013**

- Rhythm/runner game; With another, made our engine and level creation tool in html5/js.
- Personally created a dynamic audio system in web.

Formal Education

University of Wisconsin-Madison 2016

Majors: Computer Science & Linguistics **Certificate:** Game Development (First one ever!)

Relevant Coursework: Data Structures, Machine Optimization, Operating Systems, Compilers, Algorithms, Artificial Intelligence, Software Eng., Graphics, Virtual Reality, Game Design, Linear Algebra, Crypto., Info. Security

Honors&Activities

International Game Dev. Assoc.

- IGDA GDC Scholar 2015

Badger Game Network

- Founder/Overseer

Undergrad Projects Lab

- Coordinator; <http://upl.cs.wisc.edu>

UW NEST Competition 2014

- 2nd place & Wisconsin Idea Award

UW NEST Competition 2013

- Wisconsin Idea Award

Google Games Chicago 2013

- 3rd overall - 1st in puzzles

BoilerMake 2014

- 2nd place (400+ hackers)

hackMIT 2013

- Featured in Boston Globe

UW Facebook Hack 2012

- Honorable Mention - Best Game

Languages&Skills

- Java • Go • Objective-C/iOS • C • C++ • Python • C# • Javascript • Unity3D • Mips/x86 asm • OpenGL •
- git • Perforce • Bash • Windows/OS X/Linux • Photoshop • Arduino • Blender • Project Euler • German •