

## Professional Experience

### Flippfly Games Contract Engineer 2016-

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

### Activision | Blizzard - Raven Software Software 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 Player Vs. Environment (PvE) game mode. (C-like scripting)

### Amazon.com - Amazon Web Services Software 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.
- Improved data accuracy by up to 300%; Resulted in vastly improved data quality and customer experience.

### Mobile Learning Incubator Software Intern Summer 2013

- Open source iOS plant identification platform; Deployed to groups of ~100 students. (Objective-C)
- Worked with a partner to create an open source iOS audio cropper tool from scratch. (Objective-C)
- Integrated two fresh apps into large existing Augmented Reality Game Platform codebase. (Objective-C)

## Selected Personal Games & Projects

### Monologue@Trainjam 2015

- Typing game in html5/js with dynamic phrase generation;
- Built with another on a 3-day train ride from Chicago to San Francisco (GDC).
- Featured at Game Developers Conference (GDC), Gamejolt, Offworld, and Vsauce3.
- Currently has >90k Plays. Can you beat it? <http://gamejolt.com/games/monologue/56005>

### Interactive Dance Environment@BoilerMake 2014 2014

- Award-winning hands-free “dance-to-code” programming IDE; Translate dance moves to Python!
- Made prototype with two others within 36 hours. (C#, Unity3D, Kinect and Leap Motion APIs)

### TextDate@facebook Midwest Regional Hackathon 2013

- Created a program that could accurately predict the year a novel was written in using ‘Machine Learning’.
- Created a standard Naive Bayes classifier system and utilized Google’s public Ngram data set.

### Mosh Ball: Computer Graphics Project 2013

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

### Pacemaker@Global Game Jam 2013 2013

- Rhythm/runner game in html5/js created with a small 4 person team for Global Game Jam 2013.
- Personally created a dynamic audio system.



## Formal Education

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### University of Wisconsin - Madison

2016

- **Majors:** Computer Sciences & Linguistics
- **Certificate:** Game Development ( Recipient of the first certificate ever to be handed out )
- **Relevant Coursework:** Data Structures, Machine Organization, Operating Systems, Compilers, Algorithms, Artificial Intelligence, Software Eng., Graphics, Virtual Reality, Game Design, Linear Algebra, Crypto., Info. Security

## Languages & Skills

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**Adept:** Go • Java • C / C++ • Objective-C / iOS • git • Perforce

**Proficient:** Python • Javascript • Unity3D • Mips/x86 • Bash • Windows/OS X/Linux • German

## Community Involvement

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### Undergraduate Projects Lab (UPL) <http://upl.cs.wisc.edu>

2012-

- Coordinator in charge of creating events and facilitating student projects to help foster UW's CS community.
- Hosted numerous 50+ person hackathons, puzzlehunts, technical talks, and department sponsored roundtables.
- Mentor beginner hackers (at hacks and online) on new technologies, career opportunities, and how to survive CS.

### Badger Game Network (BGN)

2013-

- Co-founder and overseer of UW - Madison's student organization dedicated to game development.
- Organized a ~100 person game jam with support from major local studios.

### Alternative Break

2015

- Fortunate to spend my Winter break in Rabat, Morocco to help local NGOs organize English lessons.

## Honors & Awards

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### Scholarships and Academics

- 2015: International Game Developers Association (IGDA) GDC Scholarship: <http://scholars.igda.org/>  
1 of 18 scholars selected worldwide to attend the largest Game Developers Conference (GDC).
- 2015: UW - Madison: Dean's List

### Hackathons

- 2014: BoilerMake @ Purdue: 2nd place overall out of 400+ hackers.
- 2013: hackMIT @ MIT: 'Best use of Weather Underground' & Boston Globe newspaper feature.
- 2012: facebook Hackathon @ UW - Madison: Honorable mention (Best Game).

### Other Competitions

- 2014: NEST Software Competition @ UW - Madison: 2nd place overall & Wisconsin Idea Award
- 2013: Google Games Chicago: 3rd place overall & 1st place in puzzles; Youngest team to compete.
- 2013: NEST Software Competition @ UW - Madison: Winner of Wisconsin Idea Award