

Professional Experience

Activision Blizzard - Raven Software	Software Engineer	May 2016 -
<ul style="list-style-type: none">• <u>Call of Duty Online</u> Major Mode Gameplay Team• Create and maintain fresh game modes; Port modes/features from previous CoD titles. (C++, C-like scripting)• Developed an in-game automated testing tool to assist designers and map builders. (C-like scripting)• Wrote an onboarding guide/FAQ for new engineering hires to get up to speed quickly.		
Flippfly Games	Contract Engineer	Spring 2016
<ul style="list-style-type: none">• Helped port a prototype of Race The Sun to AppleTV. (tvOS, Unity3D, C#)		
Activision Blizzard - Raven Software	Software Intern	Summer 2015
<ul style="list-style-type: none">• <u>Call of Duty Online</u> Major Mode Gameplay Team• 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
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• Typing game in html5/js with dynamic phrase generation; Built on a 3-day train from Chicago to San Francisco.• Featured at Game Developers Conference (GDC), Gamejolt, Offworld, and Vsauce3.• Currently has <u>>90k Plays</u>. Can you beat it? http://gamejolt.com/games/monologue/56005	
Interactive Dance Environment@BoilerMake	2014
<ul style="list-style-type: none">• 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 Hackathon	2013
<ul style="list-style-type: none">• Program to predict when English novels were written. Used a Naive Bayes Classifier and Google’s Ngram set.	
Mosh Ball: Computer Graphics Project	2013
<ul style="list-style-type: none">• Arena ball game made with a partner using C++, OpenGL, and Box2d for Physics.• Features some Gooch Shaders, Perlin Noise Shaders, and Dynamic Shadows.	

Formal Education

University of Wisconsin - Madison	2016
<ul style="list-style-type: none">• 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	





Community Involvement

International Game Developers Association Foundation	2017 - Present
<ul style="list-style-type: none">• GDC Scholars Program Coordinator	
Undergraduate Projects Lab (UPL) https://uw-upl.github.io/about.html	2012 - 2016
<ul style="list-style-type: none">• 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 - 2016
<ul style="list-style-type: none">• 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.	

Honors & Awards

Scholarships and Academics
<ul style="list-style-type: none">• 2016: UW - Madison Computer Science Department: ‘Gold Brick’ award for “unsung but critical tasks”• 2015: International Game Developers Association (IGDA) GDC Scholarship: 1 of 18 scholars selected worldwide to attend the largest Game Developers Conference (GDC).• 2015: UW - Madison: Dean’s List
Hackathons
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• 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

Things that excite me:

- Golang • Gardening • git • Outreach • Rabbits • Lego • Linguistics • Puzzles • ProjectEuler • hackernews • Cognitive Science • Music/Raves • Interactive Narrative • Hackathons • Language •  •  •  •  •