

Professional Experience

Activision Blizzard - Raven Software	Software Engineer	Feb 2018 - Present
	Associate Software Engineer	May 2016 - Feb 2018
	Software Engineer Intern	Summer 2015

Worked on gameplay engineering teams and projects across all CoD pillars. [SP, MP, Co-op] (C++, C-like scripting)
Tasks often fluctuated between game design, optimization, and feature architecture / ownership.

Misc. Activision (ATVI)

- Led small team in ATVI-wide innovation competition. Pitched to Executives, Studio Heads, and Directors.
 - Only team to reach final round twice. 2018: Business Challenge. 2019: Creative Challenge.
- University Relations: Intern mentor; Onsite recruiting at schools across the country.
- Wrote an onboarding guide/FAQ for new engineering hires.

Unreleased AAA Titles

- Coordinated with multiple studios and stakeholders to lead creation and refactors of widely used systems.
- Engineering point of contact for player mechanics and movement on unannounced CoD project.
- Worked with designers and data teams across ATVI on analytics instrumentation and design.

Call of Duty Black Ops III

- Worked alongside other studios to implement core features for MP and an unreleased project.

Call of Duty Online

- Worked with small team (US and China) to create fresh modes; Port modes/features from previous titles.
- Architected and refactored multiple systems in our big, beautiful, legacy, Frankenstein-of-a-codebase.
- Developed an in-game automated testing tool to assist designers and map builders on CoD's first Battle Royale.
- Designed & Implemented player ranking system. Used live metrics to tune in-game reward/lootbox distribution.

Flippfly Games	Contract Engineer	Spring 2016
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- Worked with Flippfly to port a prototype of popular indie title Race The Sun to AppleTV. (tvOS, Unity3D, C#)

Amazon.com - Amazon Web Services	Software Intern	Summer 2014
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- 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
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- Open source iOS plant identification platform from scratch; Deployed to groups of ~100 students. (Objective-C)
- Standalone open source iOS audio cropping tool from scratch. Integrated within larger platform.

Selected Personal Games & Projects

Monologue@Trainjam	2015
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- Typing game with dynamic phrase generation. Built on a 3-day train from Chicago to San Francisco. (html5/js)
- Featured at Game Developers Conference (GDC), Gamejolt, Offworld, and Vsauce3. Currently has >100k Plays.

Interactive Dance Environment@Boilermake	2014
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- Award-winning hands-free "dance-to-code" programming IDE; (C#, Unity3D, Kinect and Leap Motion APIs)

Formal Education

University of Wisconsin - Madison

2016

- **Majors:** Computer Sciences & Linguistics
- **Emphasis:** Game Development (Helped create the emphasis)
- **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 - 2018

- GDC Scholars Program Coordinator
- Worked year-round to bring 18 talented students of diverse backgrounds and disciplines to GDC.

Undergraduate Projects Lab (UPL) <https://uw-upl.github.io/about.html>

2012 - 2016

- 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

- 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

- 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

- 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

Things that excite me:

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