

# THOMAS BARTLETT

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## EDUCATION

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**University of Michigan**, Ann Arbor, MI    **BSE Computer Science – Engineering**    GPA 3.43    *April 2018*  
Coursework: Software Engineering, Distributed Systems, Web Systems, Computer Security, Artificial Intelligence, System Design in C++, Operating Systems, Computer Organization, Agile Web Development, Object Oriented Programming, Data Structures & Algorithms, Computer Game Development

## SKILLS

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**Languages:** C++, C#, Java, Python, Go, JavaScript, SQL, HTML/CSS, MATLAB, Cg/HLSL

**Frameworks:** Unity, Node.js, Express, Angular, jQuery, Flask, Motive, Visual Studio, Git

## EXPERIENCE

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### Software Development Intern, Translation Framework Team

*Autodesk Inc.*

*June - August 2016, June - August 2017*

- Designed and prototyped single page web application to run and view file translations with 327 options using Angular, HTML, CSS, JavaScript, Node.js, Express, AWS, and the Autodesk Forge API
- Refactored C++ interface of 16 separate 3D file formats for increased modularity and performance
- Used scrum methodologies in agile team environment for scope and task management

### Instructional Aide, EECS 494: Computer Game Design & Development

*University of Michigan, College of Engineering*

*September 2017 - Present*

- Prepared and taught 18 in-class Unity/C# programming workshops and exercises
- Created 13 online Unity/C# programming tutorials and 3 editor tools to expedite software development
- Provided software design feedback at scheduled office hours and through project grading

### Emerging Technologies Consultant, Software Development Engineer

*Digital Media Commons, University of Michigan*

*March 2015 - Present*

- Consulted and assisted faculty with software development in Unity/C# and VR/AR projects
- Wrote scripts to maintain and upgrade software on 120 workstations across multiple lab environments
- Developed Unity mobile app for real time student interaction with 3D graphic displays in commons

## PROJECTS

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### Predictus

*University of Michigan, Software Engineering - MDE, Winter 2017*

- Designed and developed mobile tool in Unity to allow orthopedic surgeons visualize chest deformities in 3D

### Tumbleweed Dodgeball

*University of Michigan, Game Development - MDE, Fall 2017*

- Prototyped and developed a multiplayer 3D video game on a team of four using Unity/C# for showcase event

### Paxos Sharded Key Value Store

*University of Michigan, Distributed Systems - Fall 2018*

- Developed and optimized a scalable implementation of Paxos for use in a sharded storage system with Go

### Insta485

*University of Michigan, Web Systems - Fall 2018*

- Developed Flask backend with REST API to serve client-side dynamic pages built with HTML, CSS, and jQuery

### Central Collaborative Area Project

*Digital Media Commons, 2015-2016*

- Led multidisciplinary team of 9 to create interactive installation using Unity, AirConsole, and TouchDesigner

### Flipside, WTLDT, CyberspaceDoom, CloudChaser, Dr.Hubris, WaveDasher, Genevolution

*Wolverine Soft, 2015-2018*

- Developed multiple Unity/C# games as team participant in 48 hour game development competitions
- 5 games won 1<sup>st</sup> place, 1 game won 2<sup>nd</sup> place, and 1 game won 3<sup>rd</sup> place over approximately 10 other teams

## LEADERSHIP & INVOLVEMENT

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**President, Creative Coordinator**, Wolverine Soft: UofM Computer Game Development Club

*2014-2018*

**Performance Block**, University of Michigan Marching Band

*2014-2017*