

## Education

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### **Carnegie Mellon University • Entertainment Technology Center**

Masters of Entertainment Technology

Pittsburgh, PA

Dec. 2013

### **Bloomsburg University**

B.S. Computer Science • B.S. Mathematics

Bloomsburg, PA

May 2011

## Technical Arsenal

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<i>Coding</i>	C#, C/C++, Java, Python, PHP, SQL, DirectX, HLSL, CG, Kinect, Wii Remote
<i>Software</i>	Unity3D, UDK, Visual Studio, XCode, NGUI, Oracle Forms, FFmpeg
<i>Version Control</i>	Git, Mercurial, Perforce, SVN
<i>Content Design</i>	Photoshop, After Effects, Maya (Dynamics) , 3ds Max FumeFX

## Professional Experience

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### **Interaction Prototyper • Magic Leap • 4/2016 - Present**

- Closely work with designers in order to find the best solutions for interacting in AR
- Wrote a multiplatform input manager that is now used as a base for all prototyping

### **Lead Programmer • SeaShells Education Software • 8/2014 – Present (currently part time)**

- Developed a multiplatform offline speech recognition plugin and API for Unity
- Created reconfigurable event based gameplay systems driven by speech recognition
- Iterated with artist to create the UI and when adding artistic flare to the game
- Mentored interns by introducing best practices, encouraged them to adopt emerging standards in gameplay development and gave code reviews

### **Senior Developer • iPipeline • 9/2015 – 4/2016**

- Worked on AFFIRM for annuities, a monolithic project with client specific specializations that allows cross-client interactions and adheres to the ACORD standard
- Debugged Visual Studio and XCode projects, web-services, IIS, and business rules issues using C#, and our proprietary XPath like language in an agile environment coupled with JIRA and Version One.

## Academic Experience

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### **Lead Programmer (Unity) • Electronic Arts (Client) • 8/2013 - 12/2013**

- Implement naval warfare tactical pathing controls and combat features for iPad
- Created tools for artist to prebake environmental maps used for water
- Managed programming task distribution, asset integration, and pipeline
- Created a refraction based *wet/splash* post process effect optimized for iPad

### **Programmer (Unity) • Center for the Neural Basis of Cognition (client) • 1/2013 - 5/2013**

- Managed programming tasks, designed architecture to allow for easy customization
- Created a researcher friendly, out-of-editor, asset and level customization tool

### **Programmer (Unity) • Building Virtual Worlds (class) • 1/2012 - 5/2012**

- Rapid prototyped five games in one to three weeks in an agile team environment
- Programmed games that incorporated the use of the Kinect, PS Moves, and Wii Remotes

### **Undergraduate Independent Study in DirectX 10 • 1/2011 - 5/2011**

- Programmed particle systems to be driven by the GPU using the stream output stage
- Implemented shadow mapping and convolution based animated water waves