

Professional Experience

Senior Interaction Engineer (AR) • Magic Leap • 4/2016 – Present

- Prototyping the entirety of the Magic Leap One's operating system UI/UX in Unity
- Ensuring proper full-stack performance of the controller for the UX team.
- Developing input algorithms; examples include touchpad cursor movement and 6DoF 3D manipulation of objects
- Wrote a multi-hardware input manager that was used as a base for all prototyping reducing initial overhead, build time, and easing cross project collaboration
- Managing asset integration ensuring performant scenes, models, VFX, and shaders
- Setting up performance guidelines and best practices for contractors and developers

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

- Set up and documented a development environment for the iPad version of our product (Affirm for Annuities)
- Debugged various platform, web-service, IIS, and business rules issues using C#, and our proprietary XPath like language

Lead Programmer (mobile) • SeaShells Education Software • 8/2014 – Present (part time)

- Developed a multiplatform offline speech recognition plugin and API for Unity
- Worked with content creators to create tools to better preview and import assets
- Created reconfigurable event-based gameplay systems driven by speech recognition
- Iterated with artist to create the UI
- Mentored interns, encouraging them to adopt emerging standards in gameplay development

Academic Experience

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

- Implemented 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) • Building Virtual Worlds (class) • 1/2012 - 5/2012

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

Technical Skills

Coding	C#, C/C++, Java, Python, PHP, SQL, DirectX, HLSL, CG, Kinect, Wii Remote
VR/AR	LuminOS, Magic Leap SDK, Vive, Stem 6DoF
Software	Unity3D, UDK, Visual Studio, XCode, Jira
Version Control	Git, Mercurial, Perforce, Gerrit
Content Design	Photoshop, After Effects, Maya, 3ds Max FumeFX

Education

Carnegie Mellon University

Masters of Entertainment Technology

Pittsburgh, PA

Dec. 2013

Bloomsburg University

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

Bloomsburg, PA

May 2011