DEAN COHEN

A passion for technology, gaming, and game development influences every facet of my life, from personal game playing, game development, and competitions to my status as a junior in the GIMM (Gaming, Interactive Media, and Mobile Technology) program at Boise State University to my professional work utilizing my gaming, software development, augmented and virtual reality, and creative expertise.

EXPERIENCE

DEVELOPER - BOISE STATE UNIVERSITY; BOISE, ID 1/2017 - PRESENT

Develop simulations and experiences for educational and enterprise purposes.

- Create VR Sculpting and Sistine Chapel Experience for the upcoming Boise State University Art Building World Museum.
- Create a WW1 VR simulation for the Earl Museum at the Idaho Penitentiary.
- Develop an educational VR catheter insertion simulation for nursing schools worldwide.
- Create a 360° Hell's Canyon Dam interactive video.

PEER MENTOR – BOISE STATE UNIVERSITY; BOISE, ID 8/2016 – 5/2017

Guided and tutored new Boise State University GIMM students in coding and design principles for university projects.

• Wrote code in Actionscript in Adobe Animate's Development Environment.

VR DEVELOPER – BION STUDIO; BOISE, ID 10/2016 – 3/2017

Developed VR solutions and programs for entertainment, enterprise, and educational purposes.

- Created VR educational experiences for elementary students.
- Created a Japanese style VR game.

LAB TECHNICIAN - BOISE STATE UNIVERSITY/IDAHO NATIONAL LABORATORY; BOISE, ID 2/2016 - 12/2016

Developed an augmented reality app to provide visualization for the Idaho National Laboratory's data on electric cars and graphite cylinders in nuclear reactors.

- Wrote code using Unity's Integrated Development Environment and third party software Vuforia.
- Wrote custom shader code and created a custom nearest-neighbor algorithm.

EDUCATION

Junior - GIMM major/Psychology minor at Boise State University. Dean's list with highest honors - 3.9 G.P.A. Bob and Kathy Kustra Scholarship for the College of Innovation and Design.

TECHNICAL SKILLS

Unity Certified Developer.

- Understanding and implementation of GPU FX in Unity, especially with particles.
- VR integration with Unity using Oculus Rift, HTC Vive, Gear VR, and Daydream, as well as AR integration using Vuforia.
- Familiar with AWS Database and online API integration with Unity.

Experienced in Unix Shell, PHP, PowerShell, ActionScript3, C, C#, ShaderLab, HTML, CSS, JavaScript, Arduino.

Excellent game design techniques and coding practices.

Proficient in programmatic mathematics (noise generation, random number generation, statistics, vector math, quaternion rotation, linear algebra and calculus).

Experience with 360° cameras, principles, and stitching techniques.

Created holographic projections using Arduino, Unity, and basic building supplies.

ACHIEVEMENTS AND ADDITIONAL SKILLS

Participated in the International Conference for Undergraduate Research for work in AR as well as mobile GPU rendering. Created VR cooperative puzzle game in one semester.

Built EC2 AWS Portfolio Website using Wordpress from scratch.

Created an augmented reality massive multi-player geo-tagging app utilizing an AWS database for an Appathon competition. Developed a VR exploratory game that implemented custom created GPU particles in an Immersathon Game Jam, winning first place in the student division.

API to create a custom procedural graphing algorithm.

Proficient in development in a Windows based environment.