# ZACH SHERIN

# VIRTUAL REALITY | GAMES | SOFTWARE AND ELECTRICAL ENGINEERING zachary.sherin@gmail.com

#### WHO AM I

I build virtual reality and game experiences to help users understand complex ideas and large volumes of data. I create and improve on software and electrical engineering solutions for problems across graphics, game design, and fabrication.

#### **Education**

MIT 2015 B.S. Electrical Engineering and Computer Science MIT 2016 M. Eng Electrical Engineering and Computer Science

# **Skills**

Blender, Unity3D, C++, C#, Java, OpenGL in C/C++, Mandarin Chinese, Python, MATLAB, Git, Feedback Design, Power Electronics

#### Relevant Coursework

6.837 Computer Graphics, 6.S079 Computational Fabrication, 6.036 Machine Learning, 6.006 Algorithms, 6.336 Numeric Simulation

# VIRTUAL REALITY AND GAMES

# Einstein's Playground, MIT Game Lab 2015-2016

My Master's thesis, Einstein's Playground, is a full-dome experience for museums. Built to demonstrate and teach the concepts of special relativity. Nominated for a Jackson Hole Film Festival Science Media Award in the Interactive category.

# Hololens Sidekick, Jet Propulsion Lab 2015

Sidekick utilizes the Microsoft Hololens to aid astronauts and spacecraft engineers in their daily routine with augmented reality. It enabled path finding, inventory management, and holographic viewing of 3D systems.

# Virtual Reality Museum for All, MIT 2015

A daily museum viewable through Google Cardboard that builds itself fresh every 24 hours. Uses art found on DeviantArt as a push against the definition of museum-worthy art.

# Virtual Mars, Jet Propulsion Lab 2013

Designed and developed a fully immersive experience that allowed the user to see and move through any location the Mars Science Laboratory rover had collected data from.

### SOFTWARE AND ELECTRICAL ENGINEERING

# Antenna Switching Software, netBlazr 2016

Designed and implemented antenna selection software to increase throughput and SNR of urban wireless mesh networks. General improvements to netBlazr's infrastructure and monitoring.

# Tree Optimization for Animation, Disney Animation 2015

Wrote software to interface with an existing product to help animators create procedural trees with greater artistic direction. Optimized generated curves to look similar to the base tree an animator provided.