ZACH SHERIN

VIRTUAL REALITY | GAMES | SOFTWARE AND ELECTRICAL ENGINEERING
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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 Electrical Engineering and Computer Science

GPA: 4.4/5.0

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

Cardboard Virtual Reality, MIT 2014

Created a system for immersive virtual reality experiences using Google Cardboard and an overhead-tracking camera, used for a short game.

Virtual Mars, Jet Propulsion Lab 2013

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

A Slower Speed of Light, GAMBIT/MIT Game Lab 2012-2013

Designed and improved on an engine for visualizing special relativity in games, which would later become Open Relativity.

Developed *A Slower Speed of Light*, an educational game that presented the difficult concepts of special relativity in an engaging short experience.

SOFTWARE AND ELECTRICAL ENGINEERING

Photogrammetry Dome, Floored 2014

Built a one-meter wide dome with ninety 1-watt LEDs for materials capture used in 3D rendering software.

Improved on the design, shrinking it to a single square away of RGB LEDs with faster capture, cheaper construction, and less data

Finite Element Analysis, MIT 2014

Created a system that, when given an input 3D model and a material type, outputs the 3D model whose rest pose is the input 3D model.

Designed to correct sagging in soft printed models, but can also be applied to procedural animation.

Seventh Place in Battlecode Competition, MIT 2013

Created and maintained a large codebase in Java, coordinated across four programmers using Git.