Malcolm Wetzstein

Recent Computer Science Master Graduate

Summary

Experience engineering solutions to creative and open-ended problems, implementing research papers, learning new languages, tools, and methodologies quickly, and working in collaborative teams. Passionate about computer graphics, 3D math and physics, and storytelling in games and film. Interested in how technology can be used to tell stories.

Education

06-2018-09-2019

Massachusetts Institute of Technology, Cambridge, MA

MEng in Electrical Engineering and Computer Science

- <u>Thesis:</u> Custom and Interactive Environments in StarLogo Nova for Computational Modeling

- 5.0 GPA

09-2014-06-2018

Massachusetts Institute of Technology, Cambridge, MA

B.S. in Computer Science and Engineering

- 4.7 GPA

Personal Info

Phone:

808-218-2723

Email:

mxw002@gmail.com

Website (Work in Progress):

https://malcolmwetzstein.github.io

Coursework

Computer Graphics

Computational Photography

Shape Analysis (Geometry Processing)

Intro to Machine Learning

Visualization and Motion Graphics

Design Computing & 3D Modeling

Software Engineering

Design & Analysis of Algorithms

Linear Algebra

Differential Equations

See Website for More Courses

Skills

JavaScript (WebGL, React, Express) | Python (NumPy) | C++ (Halide, libigl) | OpenGL (GLSL) | DirectX (HLSL) MATLAB | Unity (C#, Vuforia) | Git | Visual Studio (Community, Code) | Rhino 3D | 3DS Max | Photoshop

Work Experience

01-2015-08-2019

Student Software Developer (Graphics Programmer)MIT Scheller Teacher Education Program (STEP Lab)

- Created fallback 3D rendering engine and software rasterization pipeline
- Rearchitected, optimize, debugged WebGL 3D rendering engine
- Created terrain engine with interactive editor
- Created asset pipeline for user uploaded 3D models

11-2019—Present

Full-Stack Software Engineer

Servco Pacific Inc, Digital Strategy Department

- AR & VR Prototyping in Unity
- Agile workflow using Jira
- Git Collaboration
- UI/UX experience with React
- CI/CD with Azure DevOps
- Interdisciplinary team of software engineers, UI/UX designers, product managers...

Projects

Fluid Flow Over Mesh Surfaces Via Mesh Parameterization (*Research*) | Augmented Reality Game & Editor Adaptive Manifolds for Real-Time High-Dimensional Filtering (*Implementation*) | See Website for Project Details