Malcolm Wetzstein

Recent Computer Science Master Graduate

Summary

Experience engineering solutions to open-ended problems, implementing research papers, and working in collaborative teams. Passionate about computer graphics, 3D math and physics, and storytelling in games and film.

Education

06-2018—09-2019

Massachusetts Institute of Technology, Cambridge, MA

MEng in Electrical Engineering and Computer Science

- Concentration in Computer Graphics

- 5.0 GPA

09-2014—06-2018

Massachusetts Institute of Technology, Cambridge, MA

B.S. in Computer Science and Engineering

- 4.7 GPA

Skills

Graphics APIs: WebGL, OpenGL, DirectX 11, DirectX 12
Shader Languages: GLSL, HLSL
Programming Languages: C++, Halide, Python, MATLAB, JavaScript
Libraries: Libigl, NumPy, SciPy
Tools: Unity (Vuforia), Git, Visual Studio Code/Community

Personal Info

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Coursework

Computer Graphics

Computational Photography

Shape Analysis (Geometry Processing)

Computer Vision

Machine Learning

Software Engineering

Design & Analysis of Algorithms

Computer Architecture

Linear Algebra

Differential Equations

Probability & Random Variables

Design Computing & 3D Modeling

Physics I & II

See Website for More Courses

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, optimized, 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.js
- *CI/CD with Azure DevOps*
- Interdisciplinary team of software engineers, UI/UX designers, product managers…

Projects

Implemented *Adaptive Manifolds for Real-Time High-Dimensional Filtering* | WIP *Augmented Reality Game*
Researched *Surface Fluid Flow via Mesh Parameterization* | WIP *Personal Website* | See Website for Project Details