Spencer Yue

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Education

Bachelor of Science, Electrical & Computer Engineering, May 2019
The University of Texas at Austin
GPA: 3.83/4.00

Courses

Computer Engineering: OS, Data Science Principles & Lab, Algorithms, Software Design I, II, & Lab, Digital Image/Video Processing, Linear Systems and Signals, DSP, Distributed Systems
Math: Real Analysis I & II, Number Theory, Linear Algebra, Discrete Mathematics, Stochastic Processes, Probability I, Differential Equations, Calculus I–III
MOOC: Intro to Parallel Programming, Web Developer Bootcamp

Projects

videomag *(https://github.com/spenceryue/videomag)*

- Implemented Eulerian Video Magnification algorithm from scientific literature in C
- Ported to WebAssembly using emscripten to run with JavaScript in a web browser

Tags: *JavaScript, C, WebAssembly, emscripten, CSS, HTML, MATLAB, Image Processing*

Pintos

- Built the process scheduler, user program support, virtual memory manager, and file system of Pintos operating system.
- Designed thread-safe data structures and policies using low-level synchronization primitives.
- Practiced code review, pair programming, version control, and organizing team schedules.

Tags: C, GDB, Bash, Make, Multithreaded Programming, Git

Cpp *(https://github.com/spenceryue/Cpp)*

- Explored features of C++17 including template metaprogramming, the standard library, and best practices.
- Learned to use build tools such as CMake to manage and customize build configurations for large projects.
- Analyzed and customized the CUDA C++ compilation process to use a different compiler and build environment without Visual Studio dependencies.

Tags: C++17, CUDA C++, Git, CMake, Bash, Sublime, MinGW, Windows Linux Subsystem

StudyParty *(https://github.com/spenceryue/chairs)*

- Built a web application to share one's location on campus with an interactive 3D interface.
- Designed and animated 3D object models using CSS transforms and Sass preprocessing.
- Researched browser rendering process to create a performant and engaging experience.

Tags: CSS/Sass, SVG, HTML, JavaScript, Front-End Web Design

Skills

Python, C, C++, CSS, JavaScript, HTML, MATLAB, CUDA C++, TensorFlow, Java, Bash

Awards

Noble Educational Fund Scholarship of $15,000 (2014)
UT Austin Engineering Honors Program, Scholarship of $5,000 (2014)
Silver Medal in HourRank 25 HackerRank Competition (2018)
Silver Medal in Week of Code 36 HackerRank Competition (2018)