**Spencer Yue**

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(405) 308-7014

**Education *Bachelor of Science, 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*](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*](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*](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++, Java, JavaScript, MATLAB, CSS, HTML, CUDA C++, TensorFlow, 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)