

Spencer Yue

spenceryue@utexas.edu

(405) 308-7014

Education	Bachelor of Science, Electrical & Computer Engineering (Honors) , May 2019 The University of Texas at Austin GPA: 3.83/4.00
Courses	<u>Computer Engineering</u> : Operating Systems, Data Science Principles (& Lab), Algorithms, Software Design (I, II, & Lab), Digital Image/Video Processing, Linear Systems and Signals <u>Math</u> : Real Analysis I, Number Theory, Linear Algebra, Discrete Mathematics, Stochastic Processes, Probability I, Differential Equations, Calculus I–III <u>Online Courses</u> : Parallel Programming (Udacity) [†] , Web Developer Bootcamp (Udemy) [†]
Projects	<u>videomag</u> (https://github.com/spenceryue/videomag) Summary : A web application to reveal nearly imperceptible changes in motion and color from a webcam using the Eulerian Video Magnification algorithm. Significance : First time implementing an algorithm from scientific literature. My largest solo project. Tags : JavaScript, C, WebAssembly, emscripten, CSS, HTML, MATLAB, Image Processing <u>Pintos</u> (private repository, no link) Summary : Built components for a simple, educational operating system including the process scheduler, user program support, virtual memory system, and file system. Significance : My most challenging software experience to date. Learned the ins and outs of a basic operating system. First time writing synchronized code. First time using version control effectively in a team. Tags : C, GDB, Bash, Make, Multithreading, Git, Systems Programming <u>Cpp</u> (https://github.com/spenceryue/Cpp) Summary : Explored features of C++17 including template metaprogramming, the standard library, best practices/idioms, and various related software development tools. Investigated compiling CUDA C++ with MinGW instead of Visual Studio on Windows. Built Python-like primitives such as <code>range()</code> and <code>zip()</code> compatible with the standard library. ^{††} Significance : Patched important gaps in my knowledge such as version control (Git) and build systems (CMake). Gained confidence, proficiency, and preference for my current dev. tools. Tags : C++17, CUDA C++, Git, CMake, Bash, Sublime, MinGW, Windows Linux Subsystem <u>chairs</u> (https://github.com/spenceryue/chairs) Summary : A collection of 3D models of chairs and tables made with CSS for Study Party web app. Significance : Built a difficult frontend design from scratch without a library or framework. Recognized some of my teamwork shortcomings including unfamiliarity with Git and the need to adjust my project ambitions and expectations if necessary to match those of my teammates. Tags : CSS/Sass, SVG, HTML, JavaScript, Front-End Design
Skills	C99, Python 3, MATLAB, C++17, CUDA C++, CSS, JavaScript, HTML, Java, Bash ^{†††}
Awards	Noble Educational Fund Scholarship of \$15,000 (2014) UT Austin Engineering Honors Program, Scholarship of \$5,000 (2014)

† In progress

†† These primitives are still incomplete

††† Ordered roughly by ability/preference from high to low