

Spencer Yue

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Education	<i>Bachelor of Science, Computer Engineering Honors</i> , May 2019 The University of Texas at Austin GPA: 3.83/4.00
Skills	Python, React, JavaScript, MATLAB, C++, CUDA C++, C, Java, CSS, HTML, TensorFlow, Bash
Work Experience	<i>Tietronix Software Inc., Software Intern (Summer 2018)</i> <ul style="list-style-type: none">▪ Designed an ultrasound imaging simulator implementing the Spatial Impulse Response algorithm on the GPU with CUDA.▪ Built a Python API with pybind11 to manage GPU memory via PyTorch Tensors.▪ Configured build system with CMake, Ninja, and clang++/lld on Windows for faster builds.▪ See https://github.com/spenceryue/OpenBCSim.
Projects	<i>videomag</i> (https://github.com/spenceryue/videomag) <ul style="list-style-type: none">▪ Built a web application implementing the Eulerian Video Magnification algorithm to visualize small changes from a user's video or web camera.▪ Wrote C implementation based on the original authors' research paper and MATLAB code.▪ Interfaced with JavaScript to run in browser by compiling to WebAssembly with emscripten. <i>StudyParty</i> (https://github.com/spenceryue/chairs) <ul style="list-style-type: none">▪ Built a web application in vanilla HTML, JavaScript, and CSS 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 and tested performance of various animation techniques with SVG, JavaScript, and CSS. <i>Pintos</i> (<i>private repo, no link</i>) <ul style="list-style-type: none">▪ Built the process scheduler, user program support, virtual memory manager, and file system modules of the Pintos operating system in C.▪ Debugged multi-threaded programs in GDB.▪ Practiced code review, paired programming, and version control (Git).
Courses	<i>Computer Engineering:</i> Operating Systems, Data Science Principles / Lab, Algorithms, Software Design 1 / 2 / Lab, Digital Image & Video Processing, Linear Systems and Signals, Distributed Systems, Intro to Linux, Digital Logic Design <i>Math:</i> Real Analysis I / II / III, Topology I, Number Theory, Linear Algebra, Discrete Mathematics, Stochastic Processes, Probability I, Differential Equations, Calculus I / II / III
Awards	Silver Medal in Week of Code 36 HackerRank Competition (2018) Silver Medal in HourRank 25 HackerRank Competition (2018) Noble Educational Fund Scholarship of \$15,000 (2014) UT Austin Engineering Honors Program, Scholarship of \$5,000 (2014)