

# Spencer Yue

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<b>Education</b>	<b><i>Bachelor of Science, Computer Engineering</i></b> , May 2019 The University of Texas at Austin GPA: 3.83/4.00
<b>Skills</b>	C++, C, Java, JavaScript, Python, MATLAB, CSS, HTML, CUDA C++, TensorFlow, Bash
<b>Projects</b>	<p><b><i>videomag</i></b> (<a href="https://github.com/spenceryue/videomag">https://github.com/spenceryue/videomag</a>)</p> <ul style="list-style-type: none"><li>▪ Built a web application implementing the Eulerian Video Magnification algorithm to visualize small changes from a user's video or web camera.</li><li>▪ Wrote C implementation based on the original authors' research paper and MATLAB code.</li><li>▪ Interfaced with JavaScript to run in browser by compiling to WebAssembly with emscripten.</li></ul> <p><b><i>Pintos</i></b></p> <ul style="list-style-type: none"><li>▪ Built the process scheduler, user program support, virtual memory manager, and file system modules of the Pintos operating system in C.</li><li>▪ Debugged multi-threaded programs in GDB.</li><li>▪ Practiced code review, pair programming, and version control (Git).</li></ul> <p><b><i>Cpp</i></b> (<a href="https://github.com/spenceryue/Cpp">https://github.com/spenceryue/Cpp</a>)</p> <ul style="list-style-type: none"><li>▪ Analyzed the CUDA C++ compilation process and built a wrapper API to interface with CUDA kernels and compile independently of Visual Studio (on Windows).</li><li>▪ Explored features of C++17, template meta-programming, STL, and best practices.</li><li>▪ Learned to use CMake to manage and customize build configurations.</li></ul> <p><b><i>StudyParty</i></b> (<a href="https://github.com/spenceryue/chairs">https://github.com/spenceryue/chairs</a>)</p> <ul style="list-style-type: none"><li>▪ Built a web application in vanilla HTML, JavaScript, and CSS to share one's location on campus with an interactive 3D interface.</li><li>▪ Designed and animated 3D object models using CSS transforms and Sass preprocessing.</li><li>▪ Researched browser rendering process and tested performance of various animation techniques with SVG, JavaScript, and CSS.</li></ul>
<b>Courses</b>	<p><b><i>Computer Engineering</i></b>: Operating Systems, Data Science Principles &amp; Lab, Algorithms, Software Design 1 &amp; 2 &amp; Lab, Digital Image &amp; Video Processing, Linear Systems and Signals, Digital Signal Processing, Distributed Systems, Intro to Linux</p> <p><b><i>Math</i></b>: Real Analysis I &amp; II, Number Theory, Linear Algebra, Discrete Mathematics, Stochastic Processes, Probability I, Differential Equations, Calculus I–III</p> <p><b><i>Online Courses</i></b>: Intro to Parallel Programming, Web Developer Bootcamp</p>
<b>Awards</b>	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)