**Spencer Yue**

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**Education *Bachelor of Science, Computer Engineering***, May 2019

The University of Texas at Austin

GPA: 3.83/4.00

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

**Work Experience *Tietronix Software Inc.***, Software Intern (Summer 2018)

**Projects *videomag*** *(*[*https://github.com/spenceryue/videomag*](https://github.com/spenceryue/videomag)*)*

* 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.

***Pintos***

* 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, pair programming, and version control (Git).

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

* Analyzed the CUDA C++ compilation process and built a wrapper API to interface with CUDA kernels and compile independently of Visual Studio (on Windows).
* Explored features of C++17, template meta-programming, STL, and best practices.
* Learned to use CMake to manage and customize build configurations.

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

* + - 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.

**Courses *Computer Engineering:*** 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

***Math:*** Real Analysis I & II, Number Theory, Linear Algebra, Discrete Mathematics,Stochastic Processes, Probability I, Differential Equations, Calculus I–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)