

# Spencer Yue

10624 Galsworthy Ln   Austin, TX 78739  
spenceryue@utexas.edu   405 308 7014



|                 |  |
|-----------------|--|
| OBJECTIVE       | Summer internship in software engineering or web development.  |
| EDUCATION       | <b>Bachelor of Science, Computer Engineering Honors</b> (May 2019)<br>The University of Texas at Austin<br>GPA: 3.84/4.00  |
| SKILLS          | TypeScript/JavaScript, Python, C++, CUDA, React  |
| WORK EXPERIENCE | <b>Tietronix Software Inc., Software Intern</b> (Jun 2018 – Aug 2018)<br>( <a href="https://github.com/spenceryue/OpenBCSim">https://github.com/spenceryue/OpenBCSim</a> ) <ul style="list-style-type: none"><li>Modified an open-source ultrasound imaging simulator to apply the Spatial Impulse Response algorithm in CUDA and C++.</li><li>Implemented a Python API with pybind11 and ATen to manage GPU memory.</li><li>Configured CMake to use clang/lld on Windows for faster builds.</li></ul>   |
| PROJECTS        | <b>Solar Monitoring Project</b> (Ongoing)<br>( <a href="https://github.com/santoso-solar-monitoring-project/main-page">https://github.com/santoso-solar-monitoring-project/main-page</a> ) <ul style="list-style-type: none"><li>Built a dashboard application to visualize solar panel performance for a UT research lab.</li><li>Written exclusively with React Hooks to learn the new API.</li><li>Designed a new pattern for type-safe, deeply-nested, inheritable default function arguments using Immutable.js and TypeScript generics.</li></ul> <b>videomag</b> (Oct 2017 – Dec 2017)<br>( <a href="https://github.com/spenceryue/videomag">https://github.com/spenceryue/videomag</a> ) <ul style="list-style-type: none"><li>Built a video filtering app implementing the Eulerian Video Magnification algorithm to magnify small changes from user's web camera.</li><li>Implemented the Laplacian Pyramid in C and compiled to WebAssembly to run in the browser with emscripten.</li><li>Modified the original color filtering algorithm to run in real-time using a windowed DTFT.</li></ul> <b>StudyParty</b> (Mar 2017 – May 2017)<br>( <a href="https://github.com/spenceryue/chairs">https://github.com/spenceryue/chairs</a> ) <ul style="list-style-type: none"><li>Built a location sharing app for two popular study locations at UT with indoor 3D floor plans.</li><li>Implemented 3D models using SVGs, CSS transforms, and Sass preprocessing.</li></ul> |
| COURSES         | Operating Systems   Algorithms   Data Science Principles   Software Design Lab<br>Complex Analysis (Graduate)   Real Analysis (Graduate)   Topology I   Algebra I  |
| AWARDS          | Silver Medal (92 <sup>th</sup> percentile) in HackerRank Week of Code 36 (2018)<br>Silver Medal (90 <sup>th</sup> percentile) in HackerRank HourRank 25 (2018)   |

