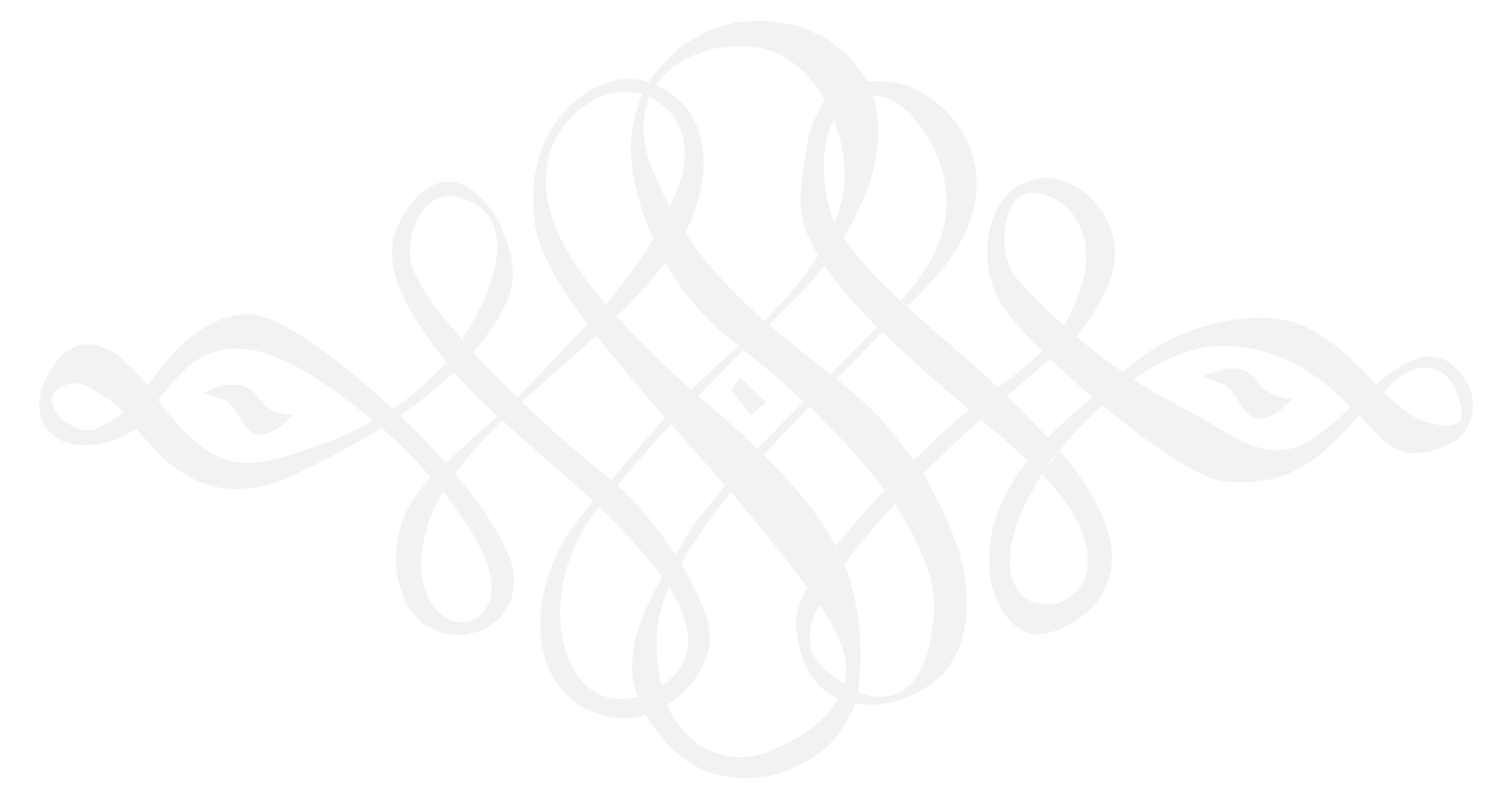
Spencer Yue

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spenceryue@utexas.edu ( 405 ) 308 7014



OBJECTIVE Summer internship in software engineering or web development.

EDUCATION **Bachelor of Science, Computer Engineering Honors** MAY 2019

The University of Texas at Austin

GPA: 3.84/4.00

SKILLS[TypeScript](http://www.typescriptlang.org/)/[JavaScript](https://developer.mozilla.org/en-US/docs/Web/JavaScript), [Python](https://docs.python.org/3/), [C++](https://isocpp.org/), [CUDA](https://developer.nvidia.com/about-cuda), [MATLAB](https://www.mathworks.com/products/matlab.html), [React](https://reactjs.org/)

EXPERIENCE

WORK **Tietronix Software Inc., Software Intern** ([https://github.com/spenceryue/OpenBCSim](https://github.com/.../OpenBCSim)) JUN – AUG 2018

* Modified an [open-source](https://github.com/sigurdstorve/OpenBCSim) ultrasound imaging [simulator](https://www.semanticscholar.org/paper/Fast-Simulation-of-Dynamic-Ultrasound-Images-Using-Storve-Torp/f1a4545c13ce98d054ad17a77b0a62fad084c20d) to apply  
  the [Spatial Impulse Response algorithm](https://field-ii.dk/documents/jaj_ieee_symp_1997.pdf) in CUDA and C++.
* Implemented a Python API with [pybind11](https://pybind11.readthedocs.io/en/stable/intro.html) and [ATen](https://github.com/pytorch/pytorch/tree/master/aten) to manage  
  GPU memory.
* Configured [CMake](https://cmake.org/) to use clang/lld on Windows for faster builds.

PROJECTS **Solar Monitoring Project**([https://github.com/santoso-solar-monitoring-project](https://github.com/santoso-solar-monitoring-project/main-page)) JAN – PRESENT

* Built a [real-time dashboard app](https://santoso-solar-monitoring-project.github.io/main-page/?selectedKind=Welcome&selectedStory=to%20Storybook&full=0&addons=1&stories=1&panelRight=0&addonPanel=storybook%2Factions%2Factions-panel) to visualize solar panel performance  
  for a UT research lab.
* Written exclusively with [React Hooks](https://reactjs.org/docs/hooks-intro.html) to learn the new API.
* Designed a simpler pattern for type-safe, deeply-nested, inheritable  
  default arguments using [Immutable.js](https://immutable-js.github.io/immutable-js/) and [TypeScript generics](https://www.typescriptlang.org/docs/handbook/generics.html).

**videomag** (<https://github.com/spenceryue/videomag>) OCT – DEC 2017

* Built a [video filtering app](https://spenceryue.me/videomag/) implementing the [Eulerian Video Magnif-ication](http://people.csail.mit.edu/mrub/evm/) algorithm to reveal subtle changes from a user’s web camera.
* Wrote the[Laplacian pyramid](http://sepwww.stanford.edu/data/media/public/sep/morgan/texturematch/paper_html/node3.html) in C and compiled to [WebAssembly](https://webassembly.org/)  
  to run in the browser using [emscripten](https://emscripten.org/).
* Modified the original color filtering algorithm to run in real-time  
  using a windowed DTFT.

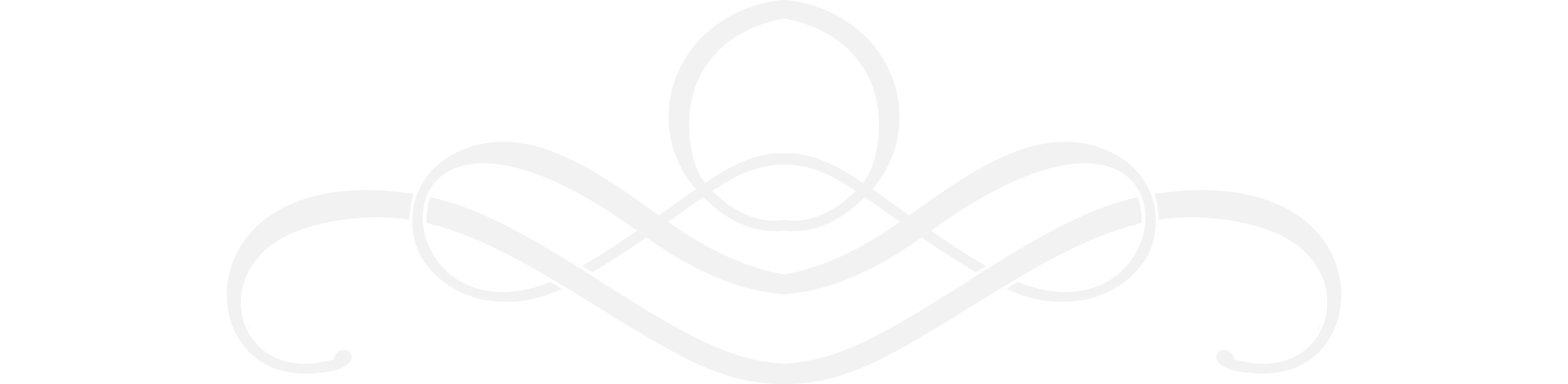
**StudyParty** ([https://github.com/spenceryue/chairs](https://github.com/.../chairs)) MAR – MAY 2017

* Made a [location sharing app](http://study-party-ut.herokuapp.com) for two popular study locations at UT  
  with indoor 3D floor plans.
* Implemented 3D models using SVGs, CSS transforms, and [Sass](https://sass-lang.com/).

COURSES[Operating Systems](http://www.ece.utexas.edu/undergraduate/courses/ee-461s), [Algorithms](http://www.ece.utexas.edu/undergraduate/courses/360c), [Data Science Principles](http://www.ece.utexas.edu/undergraduate/courses/ee-461p), [Software Lab](http://www.ece.utexas.edu/undergraduate/courses/461l),

[Complex Analysis ( Grad )](https://web.ma.utexas.edu/academics/graduate/prelims/exam_syllabi/Analysis.php), [Real Analysis ( Grad )](https://web.ma.utexas.edu/academics/graduate/prelims/exam_syllabi/Analysis.php), [Topology I](https://web.ma.utexas.edu/academics/courses/descriptions/M367K.php), [Algebra I](https://web.ma.utexas.edu/academics/courses/descriptions/M373K.php)

AWARDS **Silver Medal** ( 92th percentile ) in HackerRank [Week of Code 36](https://www.hackerrank.com/contests/w36/leaderboard/92) FEB 2018

 **Silver Medal** ( 90th percentile ) in HackerRank [HourRank 25](https://www.hackerrank.com/contests/hourrank-25/leaderboard/30) JAN 2018