kyler little

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education

bs | computer science

washington state university | december 2019

- gpa: 4.00 / 4.00
- minors: physics, math, spanish
- most outstanding senior in computer science
- orchestrated 7th annual crimsoncode hackathon and 1st ever hack wa (the seattle space needle's 1st collegiate hackathon!) as the acm vice president
- launched school's first-ever hack week – a weeklong event of tech talks, workshops, and social events

coursework

computation

algorithms
advanced data structures
graph theory
machine learning
operating systems
software design patterns
software engineering principles
software testing
systems programming

stat/math

probability & statistics
linear algebra
real analysis
multivariate calculus
differential equations
partial differential equations

skills

languages

experienced
c/c++ • python • sql
proficient
c# • java • batch/shell
familiar
type/javascript • groovy

technologies

unix/linux/windows • docker • nginx
aws • react • express • node
tableau • .net • gradle • grpc
numpy • django • postgres • docker
emacs

experience

schweitzer engineering laboratories | software engineer intern

synchrowave team — august 2019 - december 2019

- developing a microservice which allows for automatic or manual deployments of a branch's latest build artifacts as Docker containers

tableau | software engineer intern

server foundation team — june 2019 - august 2019

- implemented a new storage provider for tableau server using the java persistence api
- engineered an extensible, performance testing program in python which automatically determines tableau server storage configurations with the fastest performances for a variety of user scenarios
- utilized my program to discover a storage configuration with 10-40% improvements in server backup, workbook rendering, and workbook publishing scenarios

tableau | software engineer intern

connectivity team — may 2018 - august 2018

- prepared, cleaned, and visualized business data from tableau prep and created automatically-refreshing dashboards to monitor product health; resulted in a consistently deployable product state for versions 2018.2.3 and beyond
- built an interface in typescript that dynamically reports whether tableau prep's frontend can handle a data connector, resulting in newly surfaced data connectors from the backend (e.g. mongodb) that were shipped

washington state university | research assistant

nonlinear optics group — january 2017 - april 2018

- awarded nasa space grant to research the characterization of how photo-responsive dye-doped glassy pmma fibers, glued to paper, induce changes in the paper in response to uv light
- designed an algorithm to model the topography of the photographed objects by exploiting the thin-lens equation
- presented research at washington state's showcase for undergraduate research

washington state university | advanced math tutor

math learning center — august 2016 – december 2016

- simplified complex problems into achievable subproblems, resulting in improved students' understanding

selected projects

suffix tree

march 2019

- implemented suffix tree data structure in c++ utilizing mccreight's linear time construction algorithm
- developed automated testing with shell & docker to run a googletest test suite
- improved construction time on yeast chromosome dna sequence from 800 seconds to 0.8 seconds by optimizing program io

simplified yelp

january 2019 - april 2019

- built a react.js web application similar to yelp to run queries on large datasets
- designed rest api with dynamically constructed queries by utilizing express, node, & javascript
- improved web application responsiveness 20x by (1) taking advantage of index-only query plans where possible and (2) paginating results