

Overview

I am enthusiastic about learning, an experienced software engineer in test, and a passionate outdoorsman. I love challenges and grasp new problems quickly, and effectively communicate complicated interdisciplinary ideas in simple language. I have experience in research labs at CU Boulder and Tufts University and in software development at large hybrid cloud companies in Boston and Boulder.

Experience

NetApp

December 2018 – Present

Software Engineer in Test with the Element group within Solidfire. Created test automation framework for the performance team, including hardware management system, scheduling service, and metrics reporting, increasing test result throughput by 300%. Designed and developed virtual network automated test framework and led small tiger team to qualify new two-node feature. Wrote tools to facilitate upgrade of company-wide test code base to Python 3, including automated repository releases, dockerized development and test execution environments, and dependency management. Developed test automation in close collaboration with feature developers to rapidly test mission-critical feature development.

Hitachi Vantara

August 2017 – September 2018

Software Quality Engineer on the HCP-Anywhere team. Improved quality best practices through design and implementation of novel reviewboard integration with in-house test tracking software; streamlined test processes via scripting, automating tests, and automating deployment of test environments

BeingSattvaa

December 2018 – February 2020

Freelance Web Developer Created and modernized web presence for Singapore-based startup. Features added include HTTPS support; secure booking with iChronoz; and automatic emailing, in addition to content maintenance and SEO optimization.

Tufts University

January 2015 – May 2017

Teaching Assistant for the Data Structures (COMP-0015) class. Designed and deployed new in-person grading techniques for sorting algorithms project; tutored students in asymptotic complexity, data structures concepts and applications, and programming fundamentals; hosted collaborative grading groups with other TAs to improve the CS department’s grading consistency, transparency, and accountability.

University of Colorado - Boulder

May 2015 - August 2015

Research Assistant in the Martin Lab studying antibiotic resistant bacteria in the local watershed. Designed and deployed an interactive website tracking locations of native resistance; designed my own experiments; documented reproduction steps.

Research

Examining Disease Prevention Measures within Heterogeneous Communities

March-April 2020

Worked with five-week Net-COVID seminar and research group through the COMBINE institute at the University of Maryland. Implemented agent-based SIR model to simulate the impact of community response and control measures on pandemic spread and presented twice to working group of >200 PhDs, postdocs, professors, working professionals, etc.

Bee Trophallaxis with Correlated Random Walks

February 2019 – October 2019

Research assistant in the Peleg lab simulating bee movement within hives as correlated random walks with varying degrees of deviation to understand the connectivity of a hive system

Technology and International Migration

February 2015 – June 2015

As part of an international development hackathon, I built a web application for the location and distribution of useful resources, designed for the refugee population of Lesbos, Greece. Following that I pivoted my project to a research paper on tech-for-justice hackathons around the world and their relative benefits to the migrant community.

Computer Simulation of Liquids

September 2013 – April 2014

Undergraduate computational chemistry research in the Lin group at Tufts University designing algorithms for particle-particle interaction

Education

Tufts University

August 2013 – May 2017

Bachelor of Science - Computer Science

Coursework in CS: **Algorithms** • Data Structures • **Theory of Computation** • Machine Structure and Assembly Language Programming • **Computational Biology** • Web Programming • **Data Mining** • **Artificial Intelligence** • Discrete Math • Linear Algebra • **Structure and Function of Complex Networks** • User Interface Design • **Computing for Developing Regions**

Other Coursework: Multivariable Calculus • Organic Chemistry • Differential Equations • Creative Writing x3 • Linear Models in R (edX) • Convolutional Neural Networks in Python (Coursera) • Earth Data Analytics (CU Boulder Earthlab) • Deep Learning in Python (Udemy)

Languages/Technologies

Python, Docker, Linux, Jenkins, C++, Kubernetes, matlab, bash, git, javascript, html/css, groovy

Leadership

NetApp Solidfire, Admin Code Reviewer

December 2019 – Present

I help gatekeep code quality to Solidfire's in-house automation repositories.

Hitachi Intern Program, Mentor

April 2018 – August 2018

I taught, mentored, and facilitated the professional development of two summer interns, both current undergraduate students. Under my guidance, one of the interns exceeded productivity levels of several full-time employees on my team.

Tufts Wilderness Orientation, Leader

August 2014 – May 2017

I guided groups of incoming first-year students on weeklong backpacking trips in the White Mountains of New Hampshire, with a co-leader, representing the school and working to embolden and empower first-year students.