Tanson Lee

Computer Science

Personal Website: https://tansonlee.netlify.app/
GitHub: https://github.com/tansonlee
LinkedIn: https://linkedin.com/in/tansonlee
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Skills

Web Development
- JavaScript
- React
- REST APIs
- HTML5 / CSS3

Programming
- Python
- C
- R
- Racket

Tools
- Version Control (Git / GitHub)
- Bash Shell
- Vim

Soft Skills
- Teamwork
- Leadership
- Public Speaking
- Organization

Experience

Software Developer Intern ***Sciex*** *August 2019*
- Developed a Snorkel labeling algorithm to automate the analysis of mass spectrometry data
- Reduced analysis time from 1 hour to ~1 minute with >95% accuracy
- Presented an analysis of my findings to the team in a 45 minute presentation
- Utilized Python with Juypter Notebook with NumPy, Pandas, and Matplotlib

Computer Science, Math, Physics, Chemistry Tutor *March 2019 - Present*
- Tutored grade 10, 11, and 12 students for 150+ hours improving their grades by ~10% on average

Store Clerk ***Canadian Tire*** *July - November 2018*
- Performed effectively under stress and demonstrated strong communication skills with customers

Projects

[10+ more on GitHub and my website; link at the top right]

COVID-19 Data Tracker https://github.com/tansonlee/covid19-data-tracker
- Built a web application to visualize COVID-19 data with an intuitive and aesthetic UI/UX
- Utilized the React framework, with Axios for REST API requests, Chartjs for graphs, and Material UI

My Machine Language https://github.com/tansonlee/machine-language
- Designed and implemented a stored program computer that runs a machine language with 15 operations
- Utilized functional programming in Python and learnt about computer architecture

Sorting Algorithms https://github.com/tansonlee/sorting-algorithms
- Implemented 6 sorting algorithms to both theoretically and experimentally test their efficiencies
- Utilized Python and Matplotlib to generate, collect, and visualize the data

Collision Simulator https://github.com/tansonlee/collision-simulator
- Created a visual simulation for 2D elastic and inelastic collisions with a partner
- Utilized JavaScript with object oriented design to create a cohesive and playful UI/UX

Sudoku Solver https://github.com/tansonlee/sudoku-solver
- Created a visual sudoku puzzle solving algorithm that solves any sudoku in under 30 seconds
- Utilized JavaScript with object oriented design to implement a back tracking algorithm

Education

University of Waterloo, Bachelors of Computer Science *GPA: XX.X%*
- Participated in 2 hackathons: Hack the North, Delta Hacks
- Taking advanced level computer science courses (~6% of students in the faculty take them)

St. Robert CHS, International Baccalaureate Programme *GPA: 97.5%*
- Participated in DECA, STEM Council, SHAD, HOSA, Student Opportunity, Orchestra, Mental Health Committee