Tao Shen

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Skills

Languages Python, JavaScript, SQL, C, C#, C++, Java, HTML, CSS
Technologies React, Node, Express, MongoDB, Git, GitHub, Linux, Flask, Jupyter Notebook, Tkinter, Selenium

Education

University of Waterloo   *Waterloo, Ontario*
Bachelor's of Computer Science, Co-op   *Sept 2022 - Present*
- Cumulative GPA: 3.9/4.0

Experience

Software Developer Intern   *Mississauga, Ontario*
Hatch   *July 2022 - Aug 2022*
- Developed a dynamic GUI using **Tkinter** in Python for an ore smelting calibration tool
- Improved run time of an ore smelting calibration tool by **8 times** by integrating parallel processing

Co-Founder of Programming Club   *Oakville, Ontario*
Abbey Park High School   *Sept 2021 - June 2022*
- Constructed lessons and problem sets to prepare club members for programming competitions
- Taught Python basics weekly to **50+ club members** featuring topics such as databases and algorithms

Projects

COVID-6ix   *github.com/ShiftyTS/COVID-6ix*
Python, Selenium, Flask, HTML
- Built a web scraper to determine current COVID-19 statistics in the Greater Toronto Area, displayed in an HTML/Flask frontend and organized using tables across separate tabs for improved readability

Sudoku Board Generator and Solver   *github.com/ShiftyTS/Sudoku*
Python
- Developed a Sudoku program which randomly generates a 9x9 Sudoku board based on the chosen difficulty
- Allows the user to reveal the solution to the board which is determined using a **backtracking algorithm**

Twitter Currency Exchange Rate Bot   *github.com/ShiftyTS/TwitterBot*
Python, Selenium
- Developed a bot to automatically scrape the web for current CAD exchange rates and tweet out the data

Personal Portfolio Website   *shiftyts.github.io*
HTML, CSS, JavaScript
- Created a personal portfolio website to introduce myself and display my side projects, stylized using various animations and designed to be responsive on different viewport sizes

FiTracker   *Work in Progress*
React, Node, Express, MongoDB, Tailwind CSS
- Collaborated with two classmates to create a single-page **MERN** stack web application that allows users to track their fitness progress and past workouts
- Built frontend using React and Tailwind CSS to establish a modern UI that adapts to different viewports
- Developed a **RESTful API** with fitness data on MongoDB using Node and Express
- Working towards encrypting passwords with **bcryptJS** and adding authentication using **JSON Web Tokens** and **Google OAuth**

Interests

Anime Video Editing, Cooking Fettuccine Alfredo, Playing Piano, Personal Fitness, Discovering New Music