**John Wu**

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**OBJECTIVE**

Seeking a computer science and engineering co-op or internship utilizing programming skills gained from projects and coursework available starting May 2021; open to relocation.

**EDUCATION**

The Ohio State University, Columbus, OH

B.S. Computer Science Engineering, Expected Graduation: May, 2023

Overall GPA (4.00 scale): **3.94**;

**QUALIFICATIONS**

Coding Languages: C/C++, Python, Java, MATLAB

Operating Systems: Linux, Windows, MacOS

Technical Tools: MS Office Suite, Microcontroller, Docker

Coursework: Data Structures and Algorithms, Linear Algebra, Statistics, Software and Design, Calculus

**WORK EXPERIENCE**

Research Student, Rerout Lab

Research Assistant, Das Lab Feb 2021 – Ongoing

* Developed simulation software in C/C++ to estimate rate constant kinetics for NK cell proteins.
* Improved simulation performance by a factor of 10x, specifically particle swarm optimization component, through parallel programming.
* Processed and trained a CNN on mass cytometry data.

Undergraduate TA Aug 2021 – Dec 2021

* Graded and tutored students in introductory C/C++ programming course.

Software Intern, Converge Technologies May 2020 – Aug 2020

* Developed PWM firmware for a high voltage Stirling engine for industrial coolers
* Extensively worked with microcontrollers
* Ensured quality of custom analog-digital camera sensors through testing
* Improved power efficiency of motors using harmonic elimination PWM

**PROJECTS**

Robot Project January 2020 – May 2020

* Collaborated with a group to design a robot to navigate a complex course
* Coded in C/C++ as the main coder for the team
* Received A on the project and successfully passed all benchmark tests

Andrew Ng Machine Learning Coding Assignments June 2021 – Aug 2021

* Implemented various basic machine learning algorithms including logistic regression, two-layered neural networks, and various others to classify digits.

Software Design Project Nov 2019 – Dec 2019

* Developed and marketed a story game in C/C++ with a partner
* Produced a functioning text game: voted for best marketing and received an A on project

Hackathon Web Development Project Nov 2019

* Collaborated with a group to design a webpage to build resumes
* Gained knowledge of HTML, JavaScript, full stack development, and project planning