

Muxing (Nick) Liu

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PROGRAMMING SKILLS

Languages: Python, Java, JavaScript, C, C++, HTML, CSS, LaTeX

Technologies: Node.js, Vue.js, Express.js, MongoDB, React, React Native, Git

PROJECTS

Meeting Catalyst

Node.js, MongoDB, Vue.js, Vuetify

- Developed a web application that allows users to coordinate meeting times with colleagues.
- Efficiently implemented a REST API to interact with a No-SQL MongoDB database.
- Utilized Vue.js with Vuetify to create a user-friendly and aesthetically pleasing interface.

Pokémon Crossing

Java, Python

- Developed a re-skinned version of the open-world game Animal Crossing using Java Swing.
- Wrote Python automation scripts to edit JPG and PNG files for game sprites and graphics.
- Showcased fluency of OOP by abstracting game data into classes and using inheritance for NPCs and items.

Chronicle

Node.js, React Native

- Developed an Android application that instantly displays relevant information about books scanned by the user.
- Leveraged Google Vision and Goodreads APIs to display data to the user.
- Used core React concepts such as component state and life cycle for information modals and camera logic.

EXPERIENCE

CodeReach

Windsor, ON

Mentor

2019 - 2020

- Volunteered 3 hours/week for over a year, helping young students learn Python programming in a class setting.
- Authored programming problems and solutions, allowing students to comprehensively understand content.

Downtown Mission

Windsor, ON

Kitchen Volunteer

2019

- Communicated and collaborated efficiently with colleagues to provide hospitality for those in need.
- Engaged in community outreach, raising valuable funding for the organization.

Canadian Young Physicist Tournament

Toronto, ON

Competitor

2020

- Researched extensively 10 open-ended physics problems describing everyday phenomena.
- Collected empirical data by conducting rigorous experiments, using Python and Excel for analysis.
- Used critical thinking and teamwork skills to develop a final thesis and presented to the panel of 10 judges.

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Software Engineering, BSE (4.0 GPA, CAV 98.4%)

Expected 2025

AWARDS

Hack3 First Place Prize; Vincent Massey Secondary School Mathematics and Physics Awards; Bronze Award for the Canadian Open Mathematics Challenge Southwestern Ontario Region

INTERESTS

Strategy games, competitive math, badminton, debate