

Nick Liu

☎ (403) 680-0666 | ✉ m392liu@uwaterloo.ca | 🌐 nickliu02 | in nickliu02

Skills

Languages Python, Java, Javascript, HTML/CSS, C++, C

Technologies Node.js, Vue.js, React, Flask, MongoDB, PostgreSQL, Docker, Android Studio, Git

Experience

Highbeam

SOFTWARE ENGINEER INTERN (PART TIME)

New York, NY

Aug 2021 - PRESENT

- Integrated application with **Amazon Marketplace** to store orders placed and received by users with **Flask**
- Implemented **Github Actions** code verification for the backend framework to ensure code is properly formatted

Arctic Wolf

SOFTWARE ENGINEER INTERN

Waterloo, ON

May - Aug 2021

- Authored Python scripts to parse and escalate suspicious observations to improve scope of security coverage
- Implemented security alert suppressions to **reduce false positives by 20%**
- Developed anonymizer tool to remove customer data from test cases, **reducing time required to add data sets by 50%**

Codereach

MENTOR

Windsor, ON

Sep 2019 - Jun 2020

- Taught fundamental Python programming skills to 30 young students in a classroom setting
- Authored programming problems and solutions, allowing students to comprehensively understand content

Projects

Flash Player

PYTHON, JAVASCRIPT, HTML/CSS, OPENCV, NUMPY, MONGODB

- Created a **Chrome extension** that scans YouTube videos to skip portions with bright lights that may trigger seizures
- Leveraged **OpenCV** with **NumPy** to detect high risk video segments by performing **frame-by-frame analysis**
- Received the First Place award at Hack the Mountains 2.0 — **Best overall submission out of 600+ participants**

Subspace

NODE.JS, VUE.JS

- Developed a **cloud collaboration** system that allows users to access virtual desktop environments in the browser
- Used **Node.js** with NoVNC for live collaboration logic, displayed on a visually-pleasing **Vue.js** frontend
- Received the Finalist Award at Hack the North 2020 — **Top 24 teams out of 3000+ participants**

Sign Vision

PYTHON, TENSORFLOW, ANDROID STUDIO

- Trained a machine learning model with **Tensorflow** to identify and translate sign language symbols
- Implemented user-friendly camera scanning system with **Android Studio**

Elevate

NODE.JS, VUE.JS, MONGODB

- Developed a digital artwork sharing web application for community interaction
- Analyzed user viewing data stored with **MongoDB** to recommend posts from specific genres

Education

University of Waterloo

BACHELOR OF SOFTWARE ENGINEERING, BSE (4.0 GPA, 97.5% CAV)

Waterloo, ON

Sep 2020 - May 2025 (expected)