

# Kelvin Yu

linkedin.com/in/kelvin-u/ | yukaiwenn@gmail.com | (416) 716-8877 | github.com/kelvin-u | kelvinu.ca

## EDUCATION

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### Bachelors of Software Engineering Honours

Expected April 2025

McMaster University

Hamilton, Ontario

- **Academics:** 3.7/4.0 GPA
- **Relevant Coursework:** Data Structures and Algorithms, Software Development, Computer Architecture, OOP

## SKILLS

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**Languages** Python, Java, HTML/CSS, JavaScript, C, C ++, PHP, MySQL, Verilog, Bash

**Frameworks** React.js, TailwindCSS, Flask, Tkinter, TensorFlow, Apache Maven, Rest APIs

**Tools** Git, Microsoft Azure DevOps, Jira, JUnit, Visual Studio Code, Docker, Figma, Matlab

## EXPERIENCES

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### Toronto Dominion Bank

May 2024 - August 2024

Software Engineer Intern

Toronto, Ontario

- Incoming Software Engineer Intern for TD Bank

### Government of Ontario

May 2023 - August 2023

Software Engineer Intern

Toronto, Ontario

- Leveraged React to develop dynamic websites, resulting in a 30% increase in user engagement for Ontario's largest Cybersecurity Conference
- Implemented comprehensive PHP and MySQL based custom content management systems to dynamically create, manage, and update events for over 1,000 participants
- Utilized automation scripts through REST APIs to cut down the manual effort required for susceptibility testing
- Launched MS Azure for cloud infrastructure, tracked technical issues using Azure DevOps, scaling resources by 50%

### McMaster Formula Electric

October 2022 - May 2023

Software Developer

Hamilton, Ontario

- Converted Simulink control logic into usable C code, enabling driving functionality through vehicle dynamics
- Prioritized use of testing/debugging tools in Simulink and C, achieving faster root cause analysis for competition
- Mitigated bugs by reviewing Python code, testing modules, and version releases

## PROJECTS

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### RizzGPT

August 2023

- Programmed a conversation starter bot using OpenAI's API to generate personalized conversation openers
- Developed Python code to extract JSON files generated to train the AI using custom data sets
- Created an interactive webpage with HTML/CSS for user inputs, real-time replies, and frontend-backend connectivity

### Cognitive Sign Language Recognition

May 2023

- Developed a custom-built neural network architecture for American Sign Language detection in Python
- Integrated the OpenCV and TensorFlow library for precise hand region segmentation in gesture recognition

### Sorting Algorithm Visualizer

March 2023

- Constructed a sorting visualization application in Python displaying sorting algorithms such as Merge Sort
- Integrated the Tkinter library to create a user interface and portray various animations and colors

### 2-D Mesh Generation

December 2022

- Developed a versatile software solution in Java for creating and visualizing meshes, and polygons in a 2-D space
- Engineered comprehensive unit testing in JUnit to ensure the reliability and optimal performance of the codebase

## AWARDS

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Dean's Honours List

April 2023

Engineering Award of Excellence

September 2022