

# Kelvin Tam

Toronto, Ontario • Computer Science Co-op Student

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## Profile Summary

Engineering graduate with documented experience in aerospace machine learning & computer science research, repair mechanics and customer service. Passionate about software development and currently seeking Co-op opportunities.

## Technical Skills

**Programming Languages:** C++, C, Python, Java | **Database Management:** MySQL, Oracle 12c, MongoDB

**Web Development:** JavaScript, HTML5, CSS3, XML, JSON, Node JS, Express JS, Bootstrap, GIT, Heroku, React, JSX

**Tools:** MS Office, LaTeX, MS Visual Studio, Visual Paradigm, MS Visual Code, Figma, CATIA V5, MATLAB

**Machine Learning:** Keras, TensorFlow, Google AI | **Operating Systems:** Windows, Linux, Mac

## Education

**Computer Programming & Analysis Advanced Diploma** | Seneca College

Graduating in Aug 2023

- Cumulative **GPA: 4.0/4.0** | President's Honor List Winter & Summer 2021

**Bachelor of Aerospace Engineering (B.Eng)** | Ryerson University

Graduated Jun 2019

- Ryerson Aerospace Aircraft Design Capstone Competition (1st Place) - Project Manager

## Project Experience

**Hospital Patient Management Application** | Languages: C++, MySQL

- Developed an application for hospital administrators to register patients, manage admittance and deploy resources based on illness severity using object-oriented programming with SQL database integration

**Agricultural Drone Sensors Control Program** | Languages: C

- Developed a system control program for various Arduino drone sensors to have real-time user control/data feedback and perform necessary calculations to determine soil quality for an agricultural area of interest

**Website Portfolio** | Languages: JavaScript, HTML, CSS, JSON

- Created an online portfolio using responsive web design to showcase newly completed projects, hosted on GitHub

**SGBC Mobile Application Wireframe** | Figma, UI/UX

- Designed and iterated a mobile app wireframe for a religious organization to be outsourced for development

## Work Experience

**Research Assistant**

Jun 2020 - Jul 2021

Ryerson University (Toronto, ON)

- Developed an automated 3D printing quality control system for aerospace manufacturing purposes, yielding a 98% detection success rate for defective units and leading to increased manufacturing process reliability
- Leveraged Python, Deep Machine Learning APIs and multiple visual sensors through agile development to create a program which catalogues novel manufactured defects/printing anomalies
- Deployed a live monitoring system which detects, implements error protocols and discard faulty units mid-print to effectively reduce net manufacturing waste
- Documented the design process, system specifications, software versioning (GIT), debugging & testing process and industrial implementation strategies in technical documents to be prepared for academic peer review

**Bicycle Sales Associate & Repair Mechanic**

May 2018 - Jun 2020

Switchback Cyclery - Social Enterprise (Toronto, ON)

- Managed customer relationships, providing technical consultation expertise to help recommend custom components and builds to meet their needs, resulting in higher satisfaction rates for our services
- Developed and presented technical service solutions with component listings in consideration of clients' necessities, safety, budgets and desired performance level, and executed on those orders
- Communicated service order updates and critical findings to provide full service transparency and managed timeline expectations for the client and management

## Extracurricular Activities

Bell Geekfest Virtual Hackathon Participant

Sept 2021

Seneca Digital Health Hackathon (2nd Place)

Mar 2021

Seneca Computer Programming Discord Group Admin & Mentor (660 Members)

Jan 2021 - Present