Scott Chu

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EDUCATION

UNIVERSITY OF ALBERTA | BSc. Computer Science   Edmonton, AB | Sept 2018 - April 2022

NSERC Undergraduate Research Award 2020
Alexander Rutherford Scholarship 2018

EXPERIENCE

ALBERTASAT | Software Engineering Intern   Edmonton, AB | May 2020 – Present

- Developing interfacing software between Ex-Alta 2's on-board computer and payload.
- Programming SoC with payload subsystem API functions such as image compression.
- Assisting payload team in devising circuit board designs and test plans.
- Working with a software team using Git/Github to maintain clean code base.

UNIVERSITY OF ALBERTA | Research Assistant   Edmonton, AB | March 2020 – Present

- Game AI research. Supervised by Dr. Matthew Guzdial.
- Developing a machine learning agent that predicts rewards given by human to an existing agent.
- Writing TensorFlow code to implement LSTM machine learning agent.
- Assisting in writing and reviewing research papers for upcoming conferences.

KUMON LEARNING CENTRE | Teaching Assistant   Edmonton, AB | June 2017 – August 2019

- Assisted students (ages 3-18) with various levels of reading, writing, and mathematics.
- Communicated with parents to create an enjoyable learning environment for students.
- Entrusted with the responsibility of managing the centre's homework supply.
- Given the keys to the building and put responsible for opening and closing the centre.

SKILLS

Languages	C++, C, Python, JavaScript, HTML, CSS, LaTeX
Others	Bootstrap, Git, Beautiful Soup, FreeRTOS, TensorFlow, Arduino, Linux

PROJECTS

ARDUINOMAP | C++, Arduino, Git   https://github.com/howtobescott/ArduinoMap

- Arduino program using TFT display and joystick controls to find shortest routes between two locations.
- Implemented Dijkstra's algorithm to calculate shortest distance between two points.
- Established communication between server and client with finite state machine implementation.

LETTERWRITER | Python, Beautiful Soup, Git   https://github.com/howtobescott/LetterWriter

- A simple Python cover letter generator.
- Utilized Beautiful Soup to scrape LinkedIn and Indeed for job postings.
- Wrote Python script to collect key words from job postings.

RESTAURANT FINDER | C++, Arduino, Git   https://github.com/howtobescott/restaurantFinder

- Arduino program that locates restaurants and sorts them based on rating and proximity.
- Implemented Quick Sort and Insertion Sort algorithms.
- Created user interface using TFT display and Arduino.