# Axel Jacobsen

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## **FDUCATION**

#### UNIVERSITY OF BRITISH COLUMBIA

EXPECTED MAY 2021

Bachelor of Applied Science, Engineering Physics | Minor in Mathematics Dean's Honour List

## **EXPERIENCE**

## **CONTROL** | DATA SCIENCE CO-OP

JANUARY 2018 - APRIL 2018

Optimized SQL queries to increase execution speed by 283% Fixed bugs and re-factored old code in Javascript for the website's backend

#### THE UBYSSEY | JUNIOR SOFTWARE DEVELOPER

MAY 2017 - AUGUST 2017

Worked on Dispatch (Django / React backend platform of ubyssey.ca)
Created components that allow content to be changed quickly and with ease

## TECHNICAL EXPERIENCE

#### PAYLOAD TEAM | UBC ORBIT

SEPTEMBER 2017 - DECEMBER 2017

Worked with payload team of UBC Orbit, the UBC satellite team to compete in the Canadian Satellite Design Challenge
Wrote TensorFlow model to test the heat characteristics of our GPU

### MAZE SOLVE | Personal Project - See Github Profile

JULY 2017 - AUGUST 2017

Wrote a Python program to solve mazes with sizes above 1,000,000 pixels Used Dijkstra's Algorithm with a binary heap as the priority queue

# **VOLUNTEER EXPERIENCE**

#### WEB DEVELOPER | THE UBYSSEY

JANUARY 2017 - PRESENT

Performed data formatting and analysis of public survey data Coordinated volunteers - solved basic bug fixes and issues

### **SQUADRON COMMANDER** | 103 THUNDERBIRD SQUADRON

APRIL 2015 - JULY 2016

Led the Command Team, a group responsible for 20 senior and 60 junior cadets in the Squadron

Mentored senior cadets in leadership and organizational skills

# **ABOUT ME**

### **PROGRAMMING LANGUAGES**

Over 10 000 lines:

Python

Over 5000 lines:

Java • JavaScript

Over 1000 lines:

HTML • CSS/SCSS

Familiar:

MySQL

#### **ACTIVITIES AND INTERESTS**

I am an enthusiastic engineering student, with passion in mathematics, programming, and physics. I spend my free time working on my personal projects, climbing, biking, or skiing.