

# Axel Jacobsen

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## EXPERIENCE

### CONTROL | DATA SCIENCE CO-OP

JANUARY 2018 – APRIL 2018

- Optimized SQL queries to increase execution speed by 283%
- Wrote and Re-factored code in Javascript for the website's API

### THE UBYSSEY | JUNIOR SOFTWARE DEVELOPER

MAY 2017 – AUGUST 2017

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

## TECHNICAL PROJECTS

### 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 - guided and helped with 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

## EDUCATION

### UNIVERSITY OF BRITISH COLUMBIA

EXPECTED MAY 2021

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

## ABOUT ME

### PROGRAMMING LANGUAGES

Over 10000 lines:

Python • Java

Over 5000 lines:

JavaScript • C

Over 1000 lines:

HTML • CSS/SCSS

Familiar:

MySQL

### SUMMARY

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.