# Axel Jacobsen

## **EXPERIENCE**

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

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

#### JUNIOR SOFTWARE DEVELOPER | THE UBYSSEY

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

# **PROJECTS**

# **ROBOT COMPETITION** | Engineering Physics

May 2018 - August 2018

- Designed and built a robot to autonomously retrieve yarn Ewoks
- Developed electronics, IR detection system, and wrote software for the embedded control system. See Github for website and further information

## GENETIC PRISONERS DILEMMA | PERSONAL PROJECT

AUG 2018 - SEPTEMBER 2018

- Wrote a Java program to play iterated Prisoner's Dilemma Games.
- By giving populations different amounts of information on their games, they evolved to the known optimum strategies for the information given

# **VOLUNTEER EXPERIENCE**

## **ENGINEERING PHYSICS MENTOR | UBC**

SEPTEMBER 2018 - PRESENT

- Mentor of five 2nd year Engineering Physics Students
- Responsible for general guidance and activities for mentor group

## **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 10000 lines:
Python • Java
Over 5000 lines:
JavaScript • C
Over 1000 lines:
HTML • CSS/SCSS
Familiar:
MySQL • ATFX

#### **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.

## **Further Information**

github.com/Axel-Jacobsen | linkedin/in/Axel-Jacobsen axelnjacoben@gmail.com | 778.789.4810