

## Skyler Alderson

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## Professional Summary

- Programs small physics simulations, data analytic toys, and video games as a hobby
- Enjoys solving challenging problems
- Recent graduate from the University of British Columbia
- Worked as a Teacher's Assistant to lead physics labs
- Worked as an Undergraduate Academic Assistant to conduct data analysis in physics laboratories

## Education

- Two degrees from the University of British Columbia
  - Bachelor of Science in Physics and in Computer Science
- Have been on the Dean's List several times
- A previous executive of UBCO's Astronomy Club

## Experience

- Undergraduate academic assistant, a research position (4 months)
  - Project was to investigate the effectiveness of replacing paper lab manuals with a Python Notebook for early experimental physics laboratories
  - Wrote Python to perform data analytics on student submissions
  - Code and theme based analysis of interview and survey data
  - Lead semi-structure interviews with students
- Computer science capstone project: automatically creating and grading SQL/RelAlg questions for a third year course
  - Writing JavaScript for functional SQL and relational algebra editors
  - SQL
  - RelAl tool for relational algebra
  - Python for backend
  - Fullstack development, focus on SQL and the backend in Python
  - Project achieved the highest grade in the class
- Teacher's Assistant for three semesters (18 months)
  - Lead two experimental physics labs

- Helped create slides for the class
  - Graded homework
- Volunteer work for iGEM, a UBC club competing in an international competition in 2022
  - Frontend CSS and HTML work to design their website/wiki
  - The wiki won the [gold medal] for its category

## **Skills**

- Coding
  - Python
  - Java
  - JavaScript
  - C
  - Lua
  - Minor familiarity with Rust and R
- Physics
  - Experimental design and conduct
  - Problem solving
  - Simulation and models
- Presentations
- Writing and reports
- Communication