

# Reza Akhavan

Third Year Co-op Student of Computer Science

**Personal Website** (built on HTML5 + CSS3):

<https://www.rezaakv.com/>

## EDUCATION

**B.Sc. Computer Science (GPA 90.1/100 = A+)**

University of British Columbia (Vancouver)

09/2017 – 04/2021

In Top 5% of Faculty

## WORK AND VOLUNTEERING

**Computer Science Teaching Assistant**

For CPSC 213 at UBC CS Department

12/2018 – 05/2019

Again on 07/2019 – 08/2019

TA for computer science course CPSC 213: Computer systems which focuses on computer architecture, concurrency I/O and OS. Leading Tutorial and lab sections to help students with C, assembly, Java debugging and thread synchronization for their assignments.

**For CPSC 121 at UBC CS Department**

09/2018 – 12/2018

TA for introductory computer science course CPSC 121: Models of Computation which focuses on logical circuits, proofs of algorithms. Led two lab sections which involved utilizing logical circuit hardware and simulations using Logism.

**UBC CSSS Event Coordinator**

Volunteer at UBC

09/2018 – 08/2019

Club officer and Event organizer for Computer Science Student Society. Organized and administrated numerous non-academic events, talks and a boat trip.

**UBC Welcome Team Leader**

Volunteer at UBC

03/2018 – 08/2019

Helped with orientation of new students and logistical aspects of imagine day UBC, the welcome week.

**Project Volunteer**

For Burns Bog Conservation Society

02/2018

Delta, BC

Part of a team to dig invasive blackberry bushes that were harming the native plants at Burns Bog which is the largest bog on the west coast. A lot of work but a fun time.

## MAIN TECHNICAL SKILLS

Java

C

C++

SQL

Assembly language (x86)

## TECHNOLOGIES

Node.js | HTML5 | CSS | Git | IntelliJ | Android studio | CLion | MySQL | Workbench | Microsoft SQL Server Analysis | Data Warehousing | SSMS | PostgreSQL | JDBC | Racket | PHP | OpenGL | WebGL | Three.js

## PROJECTS

Implementation of a 3D graphical Model with

Combined shading methods (03/2019)

Implemented and used Three.js to output a 3d Model for combined shading methods. Implemented using GLSL for the graphics pipeline. Implemented more advanced features such as Shadow Mapping, Shadings and Environment Mapping.

Mars Space Port Shipment Management Database with a Website as the UI (11/2018)

Node.js, MySQL project. I used Node.js for the back-end, HTML5 for the front-end. Designed a UI for a database that I designed and implemented with MySQL from scratch. Handle reservations of rockets arriving at Mars for Elon's Martian city. Store details of Astronauts and Cargo of different Rockets. Update and display lists of a large data collection.

Fuse File system implementation of a Fat12 Volume (10/2018)

Used Fuse (in C) to implement a fat 12 file system in the user space. Implemented with a partner. It can mount an external volume formatted in Fat12 using Fuse High level API to interact with the command line.

Buses Are Us Android Application (Academic class Project) (03/2018)

Utilized TransLink Open API and parsing JSON of live data of bus locations, routes on a map as an android application using Java and JUnit for testing. Input and output was mostly implemented already since it was a class project.

## AWARDS & RECOGNITIONS

Science Student Award (11/2018) Trek

Excellence Scholarship (10/2018)

Dean of Science Scholarship (09/2018)

Science Scholar/ Honour List (05/2018)