




# Reza Akhavan

Aspiring software engineer exploring internships and full time options  
Graduating April 2021

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github.com/rezaakv 

**Personal Website** (built on HTML5 + CSS3):  
<https://www.rezaakv.com/>

## EDUCATION

**B.Sc. Computer Science (GPA 3.96/4.00)**  
University of British Columbia (Vancouver)  
09/2017 – 04/2021

**Relevant courses:** Computer Networks - Algorithms and Analysis  
Computer Hardware & Operating Systems - AI - Graphics - Relational DB  
Machine Learning and data science

### AWARDS & RECOGNITIONS:

- Science Student Award (2018, 2019)
- Trek Excellence Scholarship (2018)
- Dean of Science Scholarship (2018)
- Science scholar & Dean's Honour List (2018, 2019)

## CO-OP WORK EXPERIENCE

**Software Engineer Co-op at Copperleaf**  
Predictive Analytics Team  
09/2019 - 12/2019

- Built a sophisticated Machine Learning prototype that involved Multiclass Classification using ML.NET, data extraction and preprocessing in order to automate and optimize a core aspect of the Predictive Analytics engine of Copperleaf's C55 software.
- Worked on the back-end of the software using C#, .NET, V Studio
- Used Agile development methods and modern tools such as Azure DevOps for CI, Git, Jira, Confluence.
- Built an Automated Machine learning experiment as well

## OTHER WORK & VOLUNTEERING

**Computer Science Teaching Assistant**  
For CPSC 213 at UBC CS Department

4 Terms: 12/2018 - 07/2020

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

1 Term: 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.

## PROJECTS

### Catch the Ball (In browser Mini game)

Implemented using javascript (Three.js) and GLSL to output 3D Model utilizing combined shading methods for the graphics pipeline. Implemented more advanced features such as Shadow Mapping, Shadings and Environment Mapping. Keyboard and mouse commands in browser and capable to be played in WebGL compliant browsers.

### Mars Space Port Shipment Manager

Full stack project based on Node.js, SQL. Used Node.js for the back-end, React and HTML5 for the front-end. Implemented a Relational DB with MySQL from scratch connected to website as UI. 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 with filtering.

### FTP client & server with command line interface for file transfer

Implemented in Java and based on RFC protocols. Make multiple TCP connections to download files from any standard FTP server. Command line application with login, navigate, list and download files at the request of user.

### Insight UBC

A typescript query parser for searching UBC course and building databases. Test driven developed in collaboration with a partner

### DNS resolver client

A java based DNS resolver, for finding the CNAME and associated IPs of any URL. Based on standard RFC and UDP protocols of common name servers

### Buses Are Us Android Application

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.

## SKILLS

**Proficient:** Java | C/C++ | Python | C# | SQL | Git

### Familiar:

.NET Core | Node.js | Typescript | Javascript | HTML5 | CSS | Three.js | x86 Assembly | Bash | IntelliJ | ML.NET | Visual Studio | Android studio | CLion | Workbench | Microsoft SQL Server Analysis | SSMS | PostgreSQL | Racket | OpenGL | WebGL | JIRA | Confluence | Azure DevOps | MySQL