

Reza Akhavan

Third Year Student of Computer Science

Personal Website (built on HTML5 + CSS3):

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

EDUCATION

B.Sc. Computer Science (GPA 3.95/4.00)

University of British Columbia (Vancouver)

09/2017 – 04/2021

In Top 5% of Faculty

Relevant courses: Computer Networks - Algorithms and Analysis

Computer Hardware & Operating Systems - AI - Graphics - Relational DB

CO-OP WORK EXPERIENCE

Software Developer Co-op at Copperleaf

Predictive Analytics Team

09/2019 - 12/2019

- Successfully 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, VS

- Used Agile development methods and modern tools such as Azure DevOps for CI, Git, Jira, Confluence.

WORK AND VOLUNTEERING

Computer Science Teaching Assistant

For CPSC 213 at UBC CS Department

3 Terms: 12/2018–05/2019, 07/2019–08/2019, 01/2020 - 05/2020
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.

Project Volunteer

For Burns Bog Conservation Society

02/2018 *Delta, BC*

Part of a team to dig invasive blackberry bushes that were harming then 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/C++

SQL

.NET

TECHNOLOGIES

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

PROJECTS

Implementation of a 3D graphical Model with

Combined shading methods in a Mini Game

Implemented and used GLSL to output 3d Model utilizing combined shading methods. Implemented using Three.js for the graphics pipeline. Implemented more advanced features such as Shadow Mapping, Shadings and Environment Mapping. All with taking commands in browser and capable to be played in WebGL compliant browsers.

Mars Space Port Shipment Management Database with a Website as the UI

Node.js, MySQL project. Used Node.js for the back-end, Express.js 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 command line interface for downloading files From FTP servers

Implemented in Java 8 and based on RFC 959 protocol. 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.

Buses Are Us Android Application (Academic class Project)

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 (2018, 2019)

Trek Excellence Scholarship (10/2018)

Dean of Science Scholarship (09/2018)

Science Scholar/ Honour List (05/2018)