

EDUCATION

BSc (Computer Science Major, Data Science Minor) – on Dean's Honors List

Sep 2020 – present

University of British Columbia, Vancouver Canada

Graduation date: 2025-6

WORK EXPERIENCE

Coop Full-Stack Developer, Burnaby Canada

Jan 2023 - Present

- Wrote **unit test** using with **Junit**, **SoapUI** and **Mockito** to **mock** unnecessary dependencies(data from database and SOAP calls) for back-end methods for a new application and **report** the detected **bugs**
- **Resolved production issue** on back-end regarding to multi-thread and **upgraded** Selenium **APIs**(Webdriver, Grid) and related source code, **Maven** config to adapt new software
- **Rewrite an old legacy application** into a web application with **Angular** and **SpringBoot**
- Created **build** and **release Jenkins** jobs for applications and **deployed** them on **wildfly server** with **datasource**

Technologies: Java, Junit, Mockito, Angular, SpringBoot, HTML/CSS, JavaScript, SVN, SoapUI, Postman, Maven, Talent database, Wildfly server, Azure

TECHNICAL PROJECTS

Video Gamer Friendster - React, Redux, express, JavaScript, HTML/CSS, MongoDB, Firebase, WebSocket Jun – Aug 2023

- Used **Firebase** and **React-Router** to implement an **authentication system** that can let users **register(log)** in and then access **private routes** depending on their **auth context**.
- Used **express**, **mongoose** to create a server with **account system** that: (1) can **store account** info like profile, game list, friends into **MongoDB**. (2) let user **modify** their **profile**, **select favorite games** to their game list and **add game to server** game list (3) **integrated with Firebase** that load private routes with corresponding user info after passing the auth. (4) support users add and remove **friends** by sending, accepting, ignoring **friend requests**, view friends profile and activity. (5) implemented a **query engine** that can **match recommend accounts** depending on users info and matching options.
- Used **socket.io** to implement **real-time messaging and notification system** that allows users **send direct messages** and **gaming request** to friends, **store message history** in **MongoDB**.
- Used **React**, **Redux**, **Bootstrap** and **Leaflet map** to create the client side that: (1) **manage** client-side user **info**, **actions** and **API calls** in **reducer**, **thunk** and **service** (1) shows all **requests and friends with cards** that have **link** to their **profile**, and **show** friends **location** on a **map** (2) let user **input matching options** and **show match results** from server with **pagination** (3) let users **see and modify** their profile and game list (4) show friend list and **see chat history** and **chat** by clicking the friend. (4) show a popup with options when receiving real-time requests

UBC Course Info System - TypeScript, JavaScript, HTML/CSS, React, express, Mocha/Chai

Jan – Apr 2023

- Used **facade** design pattern to build a **query engine** that can/have (1) receive data from both **json** and **html** files and parse them into databases using **fs-extra** and **parse5** (2) store databases locally as json file to **handle crashes** and restore info (3) query **argument** with **EBNF rule** that have **selection**, **filter**, **logic** and **aggregation**.
- Wrote both **black box test** towards specification and **white box test** towards implementation with **Mocha** and **Chai-as-promise** to show the presence of bug and ensure the robustness of the project.
- Used **mutation test** to ensure the quality of test suite, applied it to the **pipeline** on GitHub for **automation**.
- Used **express** to build a **RESTful web server** for the project front-end
- Used **html/CSS**(with **Bootstrap5**) and Javascript with **React** to build the user interface that can/have (1) **query course information** such as grade average, instructor, fail and pass students by course ID and year or instructor(optional) (2) **show the location** of the classroom of all courses on a **map with markers** and other information of classroom on **popups** using **Google map API** and **Leaflet map API with React**.