

CHARLIE HUA

Bachelor of Computer Science (BCS), Bachelor of Medical Laboratory Science (BMLSc)

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WORK EXPERIENCE

Co-op Software Developer, Clio

Jan – Sep 2023

- Part of the Payment Systems team to develop, maintain, review, and troubleshoot the payments component of the Clio legal management service used by more than 150,000 users across 100 countries with Ruby on Rails
- Core team member to develop a new onboarding process aiming to consolidate user information across software
- Developed a new feature to allow users to choose their payment acceptance method from prototyping, building, QA, and deployment to production

Project Leader, Program Office for Laboratory Quality Management, UBC

Jun – Dec 2015

- Designed, distributed, and collected survey data for External Proficiency Testing centers globally to update the World Health Organization's database catalogue in compliance with ISO standards
- Compiled the data in an interactive Excel spreadsheet that allows users to search and filter as desired
- Extensively used VBA to process data, create UI elements, and eliminate repetitive work through macros

Registered Medical Laboratory Technologist (CSMLS), Vancouver General Hospital

Dec 2018 – Present

- Certified Histotechnologist performing complex procedures to prepare, analyze, and verify specimens for the diagnosis of human pathology
 - Designed SuperUser for the CoPath program. Responsible for managing the database of users, tests, and other functionality of the program, as well as troubleshooting for approximately 5000 users across all histotech labs
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ACADEMIC AND PERSONAL PROJECTS

Full-stack Travel Planning Website

May – July 2024

- Developed a dynamic travel planning website using HTML5, CSS, NodeJS, Express, React & Redux, and MongoDB
- Integrated multiple external APIs including Amadeus for flights, TripAdvisor, and Ticketmaster
- Core functionalities/features include input handling, dynamic itinerary details, CRUD operations, server-side integration, data persistence with MongoDB and Redux Persist, fully responsive design, and user auth with JWT

"Path of Gen", Video Game (overall 1st place in class)

Jan – Apr 2024

- In C++, OpenGL, and Blender, created a game of "minigames" with multiple endings
- Recreated classics including: Pac-Man, Brick Breaker, Donkey-Kong, Whack-a-Mole, and obstacle dodge
- Implemented core game engine features (movement, FPS counter), gameplay logic (mesh collisions), numerous UI/UX improvements, and contributing to overall project management through code reviews and planning

Amusement Park Database System

July – Aug 2022

- Built a web database application to model a fictional amusement park, allowing users to query information about the park guests, rides, and others, utilising the PERN stack (PostgreSQL, Express, React & Redux, Node.js)
- Created an ER diagram to map out all the existing relationships, which were subsequently normalized to BCNF
- Populated the database with SQL DDL statements and created queries to interact with the database

Unsplash Carousel

Aug 2022

- Built a carousel-style viewer to display the user-searched images from Unsplash in the web browser
 - Application was created using React and NodeJS. Images from the user's search is fetched from Unsplash API
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EDUCATION

Bachelor of Computer Science (BCS)

November 2024

University of British Columbia, Vancouver, BC

Medical Laboratory Science (MLS)

Dec 2018

British Columbia Institute of Technology, Burnaby, BC

Bachelor of Medical Laboratory Science (BMLSC)

May 2015

University of British Columbia, Vancouver, BC