

BRUCE LI

Computer Science Major, 3rd Year

+1 (403)-383-2940 ◊ yuchengli11065@gmail.com ◊ [linkedin.com/ychengli11065](https://www.linkedin.com/in/ychengli11065) ◊ github.com/ychengli11065

EDUCATION

University of British Columbia, Bachelor of Science, Computer Science Major Sep 2020 - Nov 2025

- Coursework: Data Structures and Algorithms, Algorithm Design and Analysis, Relational Databases, Computer Networking and Internet Programming, Applied Machine Learning

TECHNICAL SKILLS

Programming Languages: *Python, Java, JavaScript, TypeScript, HTML5, CSS3, C++, C,*

Frameworks/Databases: *Node.js, React, Express, PlanetScale, MongoDB, MySQL*

Tools/Environments: *VScode, Git/GitHub, JetBrains Suite, Linux, Unix/Bash/Shell, AWS Lambda, Docker*

EXPERIENCE

Software Developer Intern Sept 2022 - Apr 2023
Royal Bank of Canada *Toronto, ON*

- Engineered Python-based software wrappers, boosting the performance of internal banking systems, achieving a 40% increase in speed and reliability compared to legacy solutions
- Optimized and restructured 70+ backend processes, including data validation, loan eligibility checks, and transaction logging, ensuring secure handling of sensitive data
- Developed automation tools using PyAutoGUI to maintain GUI reliability, ensuring critical software functionality remained error-free and enhancing overall system reliability
- Contributed to weekly Agile Scrum meetings using Jira and presented to senior business leaders, highlighting the potential and impact of new banking middlewares on operational efficiency and scalability

Backend Web Developer Sept 2023 - Jan 2024
UBC Launch Pad - Design Team *Vancouver, BC*

- Built an internal user portal for the club website to manage members and resources, enhancing internal workflows for 500+ members
- Engineered RESTful APIs for user, team, and role management using Node.js, TypeScript, and AWS Lambda, optimizing backend processes
- Designed and implemented CRUD operations with MySQL and PlanetScale, ensuring database scalability and high availability
- Collaborated with frontend developers to define and integrate API contracts, ensuring seamless interaction between backend services and UI components

TECHNICAL PROJECTS

Subletter, Virtual Marketplace | *JavaScript, MySQL, NodeJS, Express, ReactJS, ChakraUI* Aug 2023

- Developed a web app enabling students to easily list and rent sublets within the university community
- Employed React, ChakraUI for frontend; Express, MySQL for backend, ensuring seamless database operations
- Engineered a real-time messaging functionality using Socket.IO, enhancing user communication

Resume Builder | *JavaScript, ReactJS, HTML5/CSS3* May 2023

- Created a responsive resume builder web app using React.js that generates professional looking resumes
- Enabled easy to use, one-click resume to PDF download feature using React-PDF
- Implemented a live resume preview feature that accurately displays the appearance of the final PDF

BattleSnake, AI Competition | *Python, Matplotlib, DigitalOcean* Apr 2023

- Led a team in the development of a snake AI that won 2nd place in RBC's 2023 BattleSnake AI Competition
- Implemented AI algorithms including MinMax and heuristics to enable the snake to look up to 7 steps ahead
- Created a visual tool using Matplotlib and Networkx to enable easy visualization of the AI's decision tree