# Derek Chu

# Year 2, Combined Major in Computer Science and Mathematics

604-441-9931 | derekdbchu@gmail.com | drkchu.com

Relevant Links: LinkedIn | GitHub

Languages: JavaScript, Python, Java, C, C++, R, HTML, CSS, Racket, MATLAB

Frameworks and Technologies: Git, Vue, Visual Studio Code

#### **EDUCATION**

### The University of British Columbia

Vancouver, BC

B.Sc., Computer Science and Mathematics

Anticipated Graduation: 2026

- Science Scholar Recipient (cumulative average 90%+ with full course load).
- Coursework: Algorithms and Data Structures, Software Design, Computer Systems, Linear Algebra,
  Statistics, Mathematical Proof, Linear Optimizations

#### **WORK EXPERIENCE**

**BrainDump** 

Vancouver, BC

Software Engineer – Contract-Based

Sep. 2023 - Present

- Worked in a small team of 3 developers, regularly engaged in code reviews and product discussions.
- Implemented user authentication processes.
- Developed internal plugins for user event logging to analyze user engagement to track KPIs.

PAI Health

Vancouver, BC

*QA Tester – Contract-Based* 

Dec. 2021 – May 2022

- Identified and logged 60+ issues involving the collection, measure, and analytics of data using Jira.
- Conducted field tests to verify beta and production code using Apple TestFlight.
- Communication with developer teams over Slack and daily stand-ups hosted on Zoom.

## **TECHNICAL PROJECTS**

DOER | Live Demo | GitHub | (JavaScript, HTML, CSS, Git)

January 2024

- Developed a web app to group and display tasks using date-fns to handle dates.
- Modified the daisyUI component library for TailwindCSS for intuitive and responsive designs.
- Utilized the Web Storage API to handle local data persistence
- Leveraged SOLID principles to encourage maintainability and ease of testing/debugging.

**CLARIFY** | Devpost | (JavaScript, HTML, CSS, Git)

November 2023

- Chrome extension which translates English idioms into simple sentences.
- Integrated the Tailwind CSS framework to keep designs clean and consistent.
- Developed feature to convert highlighted text to a POST call to the backend.

Wishlist Management System | GitHub | (Java, Swing, JUnit, JSON, Git)

January 2023

- Developed GUI using Swing, allowing user to create and manage a wish list.
- Evaluated UML class diagram and applied design patterns, leading to a 25% reduction in code coupling and 20% increase in code cohesion
- Achieved 100% code coverage using data-driven testing with JUnit framework to create unit tests.
- Implemented data persistence using a third-party JSON package.

#### **LEADERSHIP EXPERIENCE**

#### **Taiwanese Canadian Cultural Society**

Vancouver, BC

Volunteer

Jan. 2020 – Present

- Monitored and assisted groups of **20+ children** in cultural activities to facilitate a safe environment.
- Collaboratively formed daily schedules within a dynamic team environment.