

Lucy Hao

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Education

University of British Columbia
B.Sc Combined Computer Science and Chemistry

Sep 2019 - May 2024
cGPA: 3.90/4.33

Research Experience

PROOF (Prevention of Organ Failure) Centre of Excellence
Software Developer Co-op

Jan - May 2021
Vancouver, Canada

- Redesigned and refactored a fragile natural language processing pipeline in Python to extract patient information from any type of clinical note. Reduced the code-base by over **50%**.
- Increased pipeline accuracy to **91%** by utilizing pandas, nltk, scispaCy, and regular expressions.
- Published paper as second author: Chen, Y., Hao, L., Zou, V.Z., Hollander, Z., Ng, R.T., Isaac, K.V. Automated medical chart review for breast cancer outcomes research: a novel natural language processing extraction system. *BMC Med Res Methodol* 22, 136 (2022).

Teaching Experience

Systematic Program Design (CPSC 110)
Computer Science Teaching Assistant

Winter 2021, Winter 2022

- Led labs, graded exams/problem sets, and taught concepts from functional programming and data driven programming in Racket.
- Received **90%+** evaluation score during Winter 2021 term.

Software Construction (CPSC 210)
Computer Science Teaching Assistant

Winter 2020, Summer 2021

- Led labs, invigilated and graded exams, and graded final projects, and taught concepts such as test driven design, design patterns and object oriented programming in Java.
- Received **perfect** evaluation score during Summer 2021 term.

Industry Experience

Capital One
Software Engineering Intern

Jun - Aug 2022
New York, United States

- Create end-to-end tests for Mobile App Verification (MAV) on AWS Device Farm.
- Wrote tests for Capital One app using Java and Appium and Capital One website using Python and Selenium.
- Eliminated **100%** of unnecessary idling on AWS by using threads in test scripts.

Microsoft
Software Engineering Intern (Garage Program)

May - Aug 2021
Vancouver, Canada

- Collaborated with a team of 6 interns to plan and develop a sandbox tool in React, Redux, and TypeScript that allows users to easily try out the Microsoft Graph API without technical set-up.
- Added static analysis tools and pre-commit hooks, saving time for PR reviews.
- Refactored the code-base and introduced functional programming concepts, removing over **500+** lines.
- Found bug in live Graph Explorer website and had the fix merged into the production application.

Extracurricular

- Director of Outreach and Technology at StarHacks (2020-2022), Marketing Co-Director at nwPlus (2021-2022), Joytojob Panelist (2021), StarHacks Workshop Host (2021/2022), Citro Hacks Workshop Host (2021), Hydrangea Hacks Workshop Host (2021), Hacking 4 Community Panelist (2021), HackCamp Workshop Host (2021)