Lucy Hao

Updated January 31, 2024

Email: lhao03@student.ubc.ca Phone: +1 403-401-3096 Citizenship: USA, Canada

Research Interests theoretical chemistry, physical chemistry, computational chemistry, quantum

mechanics, statistical mechanics

Education University of British Columbia Vancouver, British Columbia

B.Sc. Combined Computer Science and Chemistry Sep. 2019 – Dec. 2024

GPA: 80%

Selected coursework, (* completing this term)

• CHEM 312: Introduction to Quantum Mechanics and Spectroscopy

• CHEM 304: Fundamentals of Thermodynamics and Statistical Mechanics

• CHEM 407: Statistical Mechanics in Chemistry*

CHEM 412: Electronic Structure of Atoms and Molecules*

• <u>CHEM 401</u>: Principles of Spectroscopy*

Honours and Scholarships

Biotalent Canada Student Work Placement Program Grant (\$5,000) 2021 Alexander Rutherford High School Achievement Scholarship (\$2,500) 2019

Publications

Automated medical chart review for breast cancer outcomes research: a novel natural language processing extraction system.

Chen, Y., Hao, L., Zou, V.Z., Hollander, Z., Ng, R.T., Isaac, K.V.

BMC Med Res Methodol 22, 136 (2022).

Research Experience

PROOF Centre, UBC

Advisors: Prof. Raymond Ng, Prof. Dr. Kathryn Isaac – Jan. 2021 – May 2021 Undergraduate Research Intern: Applied NLP techniques, Literature Review,

Data Curation

Teaching Experience

Systematic Program Design (CPSC 110)

Winter 2022

Average Student Rating: 90%

Systematic Program Design (CPSC 110)

Winter 2021

Average student rating: 90%.

Software Construction (CPSC 210)

Summer 2021

Average student rating: 100%.

Software Construction (CPSC 210)

Winter 2020

Average student rating: 80%.

Industry Experience

Capital One, TIP

New York City, New York

Microsoft, Garage Software Engineering Intern Vancouver, British Columbia Summer 2021

Service and outreach

Dry Lab Co-Lead and Wiki Lead, UBC iGEM

Nov 2023 - Current

Focussed on leading the dry lab team to create models and tools that are well integrated with our wet lab. Implementing an internal documentation system using practices from open source communities.

Wiki Lead and Dry Lab Member, UBC iGEM

Dec 2022 - Nov 2023

UBC iGEM is a design team focussed on applying skills from molecular biology, genetics, computational biology and microbiology to conduct research in synthetic biology.

Director of Marketing and Technology, StarHacks Sep. 2020 – Jan. 2022 StarHacks is an international non-profit striving to create gender-inclusive spaces in computer science, breaking the stereotype of what it means to be a coder one hackathon at a time.

Director of Marketing, nwPlus

Sep. 2021 – Mar. 2022

nwPlus is a student-led club supporting aspiring programmers and designers, based out of University of British Columbia.

Mentor, connect-f (nwPlus)

Jul. 2020 – Apr. 2021

A mentorship program for girls* in tech designed to pair high school students with university students and new grad mentors.

Talks and tutorials

Git, GitHub and Glue

Jan. 2024

UBC iGEM 2023/24

Intersections of Technology Panel

Jan. 2022

StarHacks II

Intro to Technical Interviews

Nov. 2021

HackCamp

Pursuing a Successful Career in CS + Technology

Jul. 2021

Hacking 4 Community

Intro to NLP

Jun. 2021

Hydrangea Hacks

Intro to Git and GitHub

Jun. 2021

Citro Hacks

StarHacks I

Computers and Technology Panel May 2021 Joy to Job Intro to Git and GitHub and Intro to Python Jan. 2021