

# ELIZABETH GILSON

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## EDUCATION

**University of California, Berkeley** **Berkeley, CA**  
**Master of Molecular Science and Software Engineering** May 2024

**University of Washington, College of Arts and Sciences** **Seattle, WA**  
**Bachelor of Science, Biochemistry, Departmental Honors, Minor in Applied Math** June 2023

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## RELEVANT EXPERIENCE

**Merck** **Berkeley, CA**  
**Capstone Project** January 2024– Current

- Finetuned an LLM for analysis of scientific articles with PyTorch using Gemma as the base model
- Automated data scraping, cleaned data, calculated performance metrics of the model
- Worked with databases using SQL

**UC Berkeley Department of Integrative Biology** **Berkeley, CA**  
**Graduate Student Instructor** Sep 2023– May 2024

- Led lab sessions of 32 students, presenting to students and guiding them through concepts in Integrative Biology
- Graded assignments and exams, and helped in the creation of new assessments
- Held office hours and provided additional support to students of different skill levels

**Chavkin Lab – UW Pharmacology** **Seattle, WA**  
**Research Intern** June 2021 – January 2023

- Researched *in vitro* intracellular signaling for various peripherally restricted drugs
- Plated and transfected cells, imaged cells under a fluorescent microscope, performed data analysis, and prepared drug and buffer solutions
- Provided over 104 pieces of data for a paper that is soon to be published
- *Presented at UW Undergraduate Research Symposium 2022*

**NIDA Summer Internship – Harvard Medical School** **Belmont, MA**  
**Research Intern** June 2022 – August 2022

- Trained one-on-one by the director of Psychiatric Neurogenomics at McLean Hospital, Dr. Carl Lin
- Researched genetic risk factors for cocaine addiction
- Conducted luciferase and protein assays, plasmid isolation, DNA purification, and PCR
- *Presented at the 2022 NIDA Summer Research Internship Program Project Showcase*

**UW Paul G. Allen School of Computer Science & Engineering** **Seattle, WA**  
**Head Teaching Assistant** June 2023 – Sep 2023

- Held weekly teaching sessions, guest lectured in topics of Data Structures and Algorithms
- Led a subcommittee of three other teaching assistants
- Graded assignments and exams, providing in-depth feedback on Java code
- Coordinated with the instructor to provide feedback and suggestions for improving the course content

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## SKILLS

**Languages:** Python, C++, Java, R, Matlab, Machine Learning Techniques (PyTorch and TensorFlow)

**Developer Tools:** Git, VS Code, Eclipse, Jupyter Notebooks **ML Models:** Llama2, Gemma

Experience in running **HPC applications** at scale using MPI and OpenMP

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## VOLUNTEER EXPERIENCE

**Free Radicals** May 2020 – June 2021

Was involved with an activist collective aimed at making science more equitable. Facilitated book clubs to share further education into the intersection of social issues and science.