

EDUCATION

Carleton College, Northfield, MN, Bachelors in Computer Science

Graduation: June 2026

- **Cumulative GPA:** 3.86
- National University of Singapore (Exchange Program, August 2024 - December 2024)
- **Awards:** Roy Grow Fellowship for independent research project on healthcare technology in Japan (December 2025)
- **Activities & Leadership:** Badminton club Treasurer (2025-2026)

EXPERIENCE

Computer Science Teaching Assistant - Carleton Academic Support Center

March 2025 - PRESENT

- Lead biweekly review sessions and 1:1 tutoring for students in fundamental “**Programming Languages: Design and Implementation**” and “**Data Structures**” concepts.
- Create supplemental instructional materials including practice worksheets and tests.
- Assist students in troubleshooting code in **C, Kotlin, and Scheme**, reinforcing best practices in programming.

Data Science Assistant - Carleton DataSquad

January 2025 - September 2025

- Co-developed a file management **Flask app** using **HTML, CSS, Javascript, Python, and SQL** for 3,000+ users, directly supporting the college’s goals for storage reduction and sustainability.
- Developed detailed documentation on both developers’ and users’ end.
- Delivered a data analytic report in **R Markdown** that provided the ITS department with a comprehensive analysis of campus-wide storage usage, helping them to identify key areas for new cost-saving policies.

Computational and Experimental Chemistry Intern - North Carolina State University

May 2024 - August 2024

- Researched the development of new synthetic methodologies using cyclopropanone molecules in the Lindsay Lab, successfully synthesizing novel pyridiniums.
- **Computationally modeled chemical reactions** using Gaussian software, measuring transition state energies and reduction potentials to determine optimal substituents for reaction pathways. Utilized Microsoft **Excel** to visualize computational data and **Powerpoint** to present findings to the Computational Chemistry department.

Biomedical and Health Informatics Intern - Oregon Health & Science University

June 2023 - September 2023

- Developed a data pipeline using **Python (pandas)** to parse hierarchical JSON data (FHIR healthcare records) into structured formats, then developed a reusable **R** analytical framework for systematic data quality assessment and segmentation analysis across multiple healthcare systems.
- Researched public APIs of national healthcare databases to assess feasibility for team adoption, documenting technical requirements and limitations.

SKILLS

- **Languages:** Python, Java, C, R, JavaScript, SQL, HTML/CSS, Kotlin
- **Frameworks & Libraries:** Flask, React
- **Tools & Platforms:** Git, PostgreSQL, SQLite, Figma, LaTeX, Microsoft Office (Excel, PowerPoint, Word)

PROJECTS

Antibiotic Testing Web Application | Figma

- Collaborated with clinical stakeholders at SingHealth to define requirements for a multi-user web application prototype.
- Designed a streamlined workflow to reduce patient result turnaround time for a novel antibiotic testing service.

Google Maps Storytelling Interface | React, CSS

- Co-developed a frontend application using React and the Google Maps JavaScript API that maps stories to real life places. Implemented state management with React Hooks to handle dynamic view switching and user interactions.

Recipe Website | HTML/CSS, JavaScript, Flask, PostgreSQL, Agile

- Worked on a team of 4 to develop a recipe searching interface that allows you to query by different parameters.