

Catherine Chen

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EDUCATION

University of California, Davis

June 2024

Bachelor of Science in Computer Science

GPA: 3.86

- **Relevant Coursework:** Data Structures and Algorithms; Software Development; Artificial Intelligence

SKILLS

- **Programming Languages:** Python, C++, HTML, CSS, R, JavaScript, SQL
- **Skills:** Git, React, Snowflake, Linux, Figma, Canva, Jira, Google Workspace

EXPERIENCE & INVOLVEMENT

Software Engineer Intern, Centene Corporation

June 2023–September 2023

- Worked with the Quality Data Hub team to standardize data for Quality Risk Adjustment Analytics
- Improved data accessibility by cataloging 900+ column descriptions to integrate into Snowflake tables
- Leveraged Snowflake SQL to perform data profiling to check for inaccuracies, errors, and missing info
- Gained proficiency in data flow analysis and data quality assessment

Software Developer, CodeLab Davis

October 2022–June 2023

- Created front-end components and pages with React and JavaScript for an internal bootcamp website
- Collaborated with backend developers and designers to develop management access components

Research Assistant, UC Davis DataLab

March 2022–June 2022

- Enhanced the Google Scholar-based publication search system for UC Davis NeuroMab Facility using R
- Built webscraping functions to scrape 60 pages of Google Scholar results returning 600+ publications
- Created a list of unique NeuroMab antibody targets to be used to search through full-text articles
- Analyzed and cleaned NeuroMab antibody data in scraped articles to check for errors and relevance

PROJECTS

Training Tool, CodeLab Davis

October 2022–June 2023

- Developed the Project Manager dashboard with React and JavaScript for an internal bootcamp website
- Built and utilized custom reusable components and components from the Mantine component library

Davis Route Planner

September 2022–December 2022

- Developed a route planner from XML and OpenStreetMap data for the Davis bus system using C++
- Finds the fastest path between two locations for different methods of travel using Dijkstra's Algorithm
- Developed a Makefile to execute files and unit tests with Google Tests

C-Docs: Open-Source C Documentation

May 2022–September 2022

- Authored articles about introduction to data structures and Linux command line interface in C
- Led article organization and implementation meetings with a team of seven
- Consolidated and published Markdown articles in a public repository on Github

Connect 4 AI Player

August 2022

- Implemented the minimax algorithm and an evaluation function in an AI player in Python
- Tested different weight matrices for the evaluation function to obtain the highest winning rate
- Won against Monte Carlo Tree Search Player in 19 out of 20 games