# RICHARD HO

Email: richard.ho200@gmail.com ▪ Phone:(760)-697-8157 ▪ Carlsbad, CA ▪
GitHub: github.com/richardho200

## Education

UC Santa Cruz | Computer Science M.S. Capstone Option| Expected Graduation: June 2024

C.S.U. San Marcos |Computer Science B.S. & Mathematics Minor| GPA: 3.81| Magna Cum Laude

**Coursework:**

CSU San Marcos: Data Structures and Algorithms, Programming Languages, Computer Architecture, Linear Algebra, Optimization, Discrete Mathematics, Intro to Deep Learning, Numeric Analysis, Intro to Artificial intelligence, Software Engineering

UCSC: Machine Learning, Artificial Intelligence, Analysis of Algorithms, Programming Languages, Advanced Topics of Machine Learning, Topics in Crowdsourcing and Collaboration, Advanced Computer Security, AI in Games

## Scholarships and Honors

**CSUSM Dean's List**: Fall 2018- Spring 2022

## Publications

Vats, Vanshika, Marzia Binta Nizam, Minghao Liu, Ziyuan Wang, Richard Ho, Mohnish Sai Prasad, Vincent Titterton et al. "A Survey on Human-AI Teaming with Large Pre-Trained Models." *arXIV preprint arXiv:2403.04931* (2024).

## Research Projects

Crowdsourcing Artificial Intelligence Tutor bot- Advised by Dr. Leilani Gilpin UC Santa Cruz (Winter 2024-Spring 2024) **Capstone Master Project**

Gathered and analyzed answers from ChatGPT for cross-reference on the legitimacy of their answers on sample data. Assisted in brainstorming and creating API on the ongoing process of a crowdsourcing tutor bot. Wrote a preliminary final report about my research progress during Winter 2024 quarter. Attempted to publish my research findings on a publication during Spring 2024 quarter as first author.

Reducing decision tree divergence for improved classification fairness(github)- Advised by Dr. Luca De Alfaro UC Santa Cruz (Fall 2023)

Using Python to develop algorithms for improved classification fairness. Conducted literature reviews on analysis of past research works on decision tree divergence issues. Implemented a decision tree algorithm on predicting recidivity to improve classification fairness, reduce false positive divergence, and false positive prediction task accuracy. Wrote a final research report about my findings.

## Project

Study Buddy- CruzHacks 2024 UC Santa Cruz –(devpost)

Created a real time app to view students' study in a crowdsourcing aspect within the app. Used Reactive Native along with learning tutorials on front-end tools to design the app within the time limit of the hackathon event.

## Experience

UCSC Teaching Assistant (10/2022- 6/2024): Grades students' assignments from programming assignments, quizzes, exams, and final exams. Creating Discussion sections related to the covered contents from lecture to prepare students for performing well on their programming assignments, quizzes, labs, and the final examination. Manages the gradebook and communicates with supervisor on ensuring priorities being met.

**Courses**:

- CSE 20(Beginning Programming in Python) Fall 2022 Quarter
- CSE 12(Assembly Language and Digital Circuits) Winter 2023 Quarter and Spring 2024 Quarter
- FILM 20A (Intro to Film Studies) Fall 2023 Quarter
- Physics 5L (Intro to Physics 1) Winter 2024 Quarter

Course evaluations provided upon request.

## Technical Skills

Programming Languages: Python, C++, HTML, and CSS

Tools & Programs: MS Visual Studio & GitHub