

Hilal Morrar

510-520-9271 | hamorrrar@ucsc.edu
[linkedin.com/in/hilal-morrrar/](https://www.linkedin.com/in/hilal-morrrar/) | github.com/hamorrrar | hilalmorrrar.com

EDUCATION

University of California, Santa Cruz

Bachelors of Science, Computer Science

Santa Cruz, CA

Sept. 2018 – June 2022

- Cumulative GPA: 3.42, Dean's Honor List in Spring 2019, Summer 2020.

EXPERIENCE

Computer Science Undergraduate Teaching Assistant

Baskin School of Engineering - Computer Science and Engineering Department

March 2020 – Present

Santa Cruz, CA

- Leading regular tutoring sessions for Applied Discrete Math, Computer Systems and Assembly Language courses.
- Gaining experience in reading code written by others and debugging it to achieve desired behavior.
- Designed and graded weekly quizzes and Python assignments for Artificial Intelligence, Machine Learning courses.

Applied Discrete Mathematics Learning Assistant

UC Santa Cruz Learning Support Services

Sept. 2019 – December 2020

Santa Cruz, CA

- Tutored over 100 students in Applied Discrete Math in 4 academic terms.
- Led tutoring sessions for peers to comprehend concepts and practice mathematical proof solving skills.
- Worked closely with supervisors to continually implement optimal tutoring practices.

RESEARCH

Applied Machine Learning Lab Research Assistant

UC Santa Cruz

Sept. 2020 – August 2021

Santa Cruz, CA

- Assisted on two projects in cognitive electrophysiology and data science under Professor Narges Norouzi.
- Designed deep machine learning model architectures to make predictions based on time-series EEG data.
- Read literature and gaining deep conceptual and technical understanding of cognitive data analysis.

Co-Principal Investigator

Waksman Student Scholars Program

August 2015 – June 2018

Tracy, CA

- Taught molecular biology & bioinformatics concepts and skills as a co-P.I. for two years.
- Published 9 scientific works into a national biotechnology database, while mentoring 35 students each year.

Plant Biology Research Lab Intern

Young Scholars Program - UC Davis

June 2017 – August 2017

Davis, CA

- Conducted and led a plant biology research project for a professor with the advisement of a graduate student.
- Wrote a formal research paper adhering to journal publication standards and presented project findings.

PROJECTS

Distributed Key-Value Store | *Go, Git, Docker*

Sept. 2021 – Decemeber 2021

- Developed the back-end API of a distributed, fault tolerant, consistent, and sharded key-value store.
- Worked in a team environment to organize feature implementation according to specifications.
- Led regular team meetings to assess progress and discuss system design.

Connect4 Artificial Intelligence Agent | *Python*

October 2020

- Built a Connect4 AI to play against a human, random move player, or another AI with a simple user interface.
- Implemented Alpha-Beta and ExpectiMax algorithms for the AI to use against other AI agents or players.

TECHNICAL SKILLS

Languages: Go, Python, C, Assembly, MATLAB, R, HTML/CSS

Frameworks/Libraries: Hugo, Gin, PyTorch, TensorFlow, NumPy, pandas, Keras, scikit-learn

Developer Tools: Git, Docker, Command Line, Google Colabs, Jupyter Notebooks, Linux/Unix