Hilal Morrar

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EDUCATION

University of California, Santa Cruz

Santa Cruz, CA

Bachelors of Computer Science

Sept. 2018 - June 2022

EXPERIENCE

Computer Science Undergraduate Teaching Assistant

March 2020 - Present

Baskin School of Engineering - Computer Science and Engineering Department

Santa Cruz, CA

 $Lead\ Tutor$

March 2020 - Present

- Leading regular tutoring sessions for Applied Discrete Mathematics, Computer Systems and Assembly Language courses.
- Collaborating and commicating with Professors and Teaching Assistants to deliver class material.
- Gaining experience in reading code written by others and debugging it to achieve desired behavior.

Reader June 2020 - July 2021

- Worked with Professor and Teaching Assistants to make quizzes, Python programming assignments, and grade them in a timely manner.
- Made a short Python script to automate attendance for Zoom lectures.
- Maintained accurate records of grades with colleagues and submitted them to Canvas Learning Management System regularly.

Applied Discrete Mathematics Learning Assistant

Sept. 2019 – December 2020

UC Santa Cruz Learning Support Services

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

Sept. 2020 – August 2020

UC Santa Cruz

Santa Cruz, CA

- Assisted on a project in cognitive electrophysiology and data science under a professor.
- 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

August 2015 – June 2018

 $Waksman\ Student\ Scholars\ Program$

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

June 2017 – August 2017

Young Scholars Program - UC Davis

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.

Distributed Key-Value Store | Go, Git, Docker

Sept. 2021 – December 2021

- Developed the back-end of a distributed, fault tolerant, and sharded key-value store using Go and the Gin framework.
- Worked in a team environment utilizing Git branches to organize feature implementation according to system specifications.
- Led regular team meetings to assess progress and discuess system design.

Unofficial UCSC Student Guide | Hugo, Git, Go

August 2021 – Present

- Work in Progress student guide for all apsects relating to the student experience at UC Santa Cruz.
- Intended to share the expertise and experiences of UC Santa Cruz students to help underclassmen and prospective students naviagte campus life.
- Working in a team environment using Git and Hugo web framework.

TECHNICAL SKILLS

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

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

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

Windows, MacOS