Hilal Morrar

hamorrar@ucsc.edu
github.com/hamorrar | linkedin.com/in/hilal-morrar | hilalmorrar.com

Education

University of California, Santa Cruz — June 2022

- Bachelor's of Science in Computer Science, Statistics Minor
- Cumulative GPA: 3.45, Dean's Honor List in Spring 2019, Summer 2020

Employment History

UC Santa Cruz – Computer Science and Engineering Department, *Lab Tutor and Reader* — March 2020 – Present

- Lab tutor for Computer Systems and Assembly Language, Course Reader for Applied Machine Learning.
- Helping peers understand and debug lab assignments in Assembly and Python.
- Collaborating with Professors and Teaching Assistants to deliver class material and evaluate performance.

UC Santa Cruz – Learning Support Services, *Learning Assistant/Tutor* — September 2019 – December 2020

- 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, *Undergraduate Researcher* — September 2020 – Present

- Leading a project on cognitive electrophysiology and data science under a professor.
- Performing data analysis in Python with Neural Networks to make a prediction based on EEG data.
- Reading literature and gaining deep conceptual and technical understanding of cognitive data analysis.

Waksman Student Scholars Program, *Co-Principal Investigator* — August 2015 – June 2018

- 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.

UC Davis Young Scholars Program, *Research Lab Intern* — June 2017 – August 2017

- 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.

Relevant Experience

Programming Languages: C, Python, Assembly, Java, MATLAB, R
Technologies: Unix, MacOS, Windows; Git/GitHub, Command Line, Google Colabs, Jupyter Notebooks
Development:

- Object-Oriented Programming; debugging; agile practices
- Abstract Data Types with various data structures in C and Python
- Convolutional, Recurrent, Fully Connected Neural Networks, Image & text recognition
- Tensorflow, PyTorch, Keras, Pandas, Scikit-learn
- Data analytics, visualization, and interpretation
- Identifying problems/bugs and creatively resolving them
- Able to quickly learn new concepts and skills to develop with high regard for quality and speed

Related Coursework

Principles of Computer Systems and Design (Operating Systems) – Spring 2021
Analysis of Algorithms – Winter 2021
Applied Bayesian Statistics (Graduate course) – Winter 2021
Artificial Intelligence – Fall 2020
Probability Theory – Spring 2020
Applied Machine Learning – Spring 2020
Numerical Analysis and Applications – Winter 2020