Eric Tang

erictang000@berkeley.edu | (408)410-3070

education

University of California, Berkeley Expected June 2022
GPA: 3.8, Major GPA: 4.0, Dean's List (Sp 19, Fa19)
B.S. Electrical Engineering and Computer Science (EECS)
Activities: The Berkeley Project, Computer Science Mentors, HKN - EECS Honor Society, IM Basketball

cousework

CS Coursework: Structure/Interpretation of Programs, Data Structures, Computer Architecture, Discrete Math, Algorithms, Security, Operating Systems
Other Coursework: Multivariable Calculus, Linear Algebra, Properties of Materials, Information Devices/Systems

skills

Languages: Java, Python, C, SQL
Other: Numpy, Pytorch, sklearn, Apache Spark, OpenMP, Git, Linux, Mandarin

research

Crommie Group *Undergraduate Researcher, April 2019-present*
- Assisted in research on local electronic, magnetic, and mechanical properties of atomic and molecular structures at surfaces, specifically working in microscopy and the creation of atomically clean graphene based 2D Field-Effect Transistors.
- Worked on various side projects involving maintenance and development of high precision transfer systems for 2D materials and Chemical Vapor Deposition (CVD) systems

Hormozdiari Lab *Research Assistant, June-August 2017*
- Worked on quantitatively comparing the performance of various algorithms for the analysis of Hi-C genomic data through their performance in identifying chromatin interactions and topographically associating domains
- Interacted with a variety of data processing software in order to create functional interaction matrix inputs to the algorithms from raw Hi-C data

teaching

CS 61B uGSI *Undergraduate Student Instructor, Jan 2020-present*
- Hosted lab sections of 30+ students and office hours to offer students support on labs, projects, and homework
- Developed and taught course review material for weekly discussions for 30+ students

Computer Science Mentors *Junior Mentor, August 2019-present*
- Led weekly sections for students in CS70 (Discrete Math and Probability) and CS 61B (Data Structures)
- Developed additional weekly practice problems and lecture material

activities

EMTranslate *Developer, November 2019-present*
- Participated in StEP, a semester long pre-accelerator program as part of the EMTranslate team--currently in the process of applying to accelerator programs
- Part of dev team currently working on an application that would faciliate effective communication between non-verbal or ESL patients and emergency medical personnel

projects

Self Driving Car Simulation - Duckietown
- Using an driving simulator to program a simulation of a self driving car with integration of image processing, object detection, image segmentation, and trajectory optimization using pytorch, sklearn, and numpy

Fantasy Basketball League Analyzer
- Used BeautifulSoup and Selenium to scrape league information and player statistics for analysis of weekly matchups, overall statistics, player value, trades, and waiver pickups using Pandas and NumPy
- Currently working on creating front facing website for analysis of any public ESPN league, as well as a publicly available weekly matchup predictor

RISC-V CPU - CS 61C (Computer Architecture)
- Designed a fully functioning 32-bit 5 stage pipelined RISC-V datapath using the logic simulator Logisim as part of the final project for CS 61C - Computer Architecture.