Kevin **Tang**

ktang.me 1739 Spruce Street, 94709, Berkeley, CA



EDUCATION

August 2016 May 2020

University of California, Berkeley

B.A. Computer Science, B.A. Astrophysics

- > Coursework CS: Algorithms, Data Structures, Machine Learning, Discrete Math and Probability Theory, Computer Architecture, Linear Algebra
- > Coursework Astrophysics: Quantum Mechanics, Electromagnetism, Mechanics, Special Relativity, Thermodynamics, Cosmology, Multivariate Calculus, Linear Algebra, Data Science Lab



EXPERIENCE

Summer 2019 Incoming Software Systems Assurance Intern, THE AEROSPACE CORPORATION, El Segundo, CA

Present August 2017

Undergraduate Researcher, University of California, Berkeley, Berkeley, CA

- > Developing a CNN model that will classify possible supernovae candidates by identifying common features in exposures in order to expedite the process of manually selecting them.
- > Creating a Python application that cleans and analyzes supernovae spectra features to relate the speed of emitted white dwarf shells with the time the supernovae first occurred.

Python Numpy PyTorch SciPy Bash

May 2017 August 2017

WFIRST Exoplanet Project Intern, NASA JET PROPULSION LABORATORY, Pasadena, CA

> Created a method to optimize observation sequences by creating distributions of star features in order to prioritize stars with a high likelihood of having "good" exoplanets.

MATLAB Excel



EXTRACURRICULARS

Present January 2019

CS61B Junior Mentor, COMPUTER SCIENCE MENTORS, Berkeley, CA

> Lead small sections of undergraduates teaching Java, data structures, and algorithms.

Java IntelliJ

Present August 2017

Project Engineer, SPACE TECHNOLOGIES AT CAL (STAC), Berkeley, CA

> Successfully created Arduino flight actuation system and STM based PCB for high altitude balloon projects testing NASA biological payloads reaching near space conditions.

C Arduino/AVR STM KiCad Eagle SolidWorks Python Excel



PROJECTS

GALAXY MORPHOLOGICAL FEATURE PREDICTOR

APRIL 2019

Created a CNN model designed to predict the probability of a galaxy image having certain features (spiral arms, bulge, bars).

Python PyTorch Numpy

IRIDUIUM SATELLITE RECEIVER

DECEMBER 2018

Created a web app to receive and parse post requests from the Iridium Satellite network to get coordinates and sensor data from projects being flown in the air.

JavaScript Node.js Express MongoDB HTML CSS Postman

MOUNTAIN MOVER MARCH 2018

Arcade style game with random world generation, interactive environment, self-pathing NPC enemies, and load/save feature. Java IntelliJ



SKILLS

Programming Python, Java, C, SQL, JavaScript, Go, RISC-V, MATLAB

Frameworks Python (numpy, pandas, pytorch, sklearn, scipy), React.js, Node.js, Express

Software/Computer Unix, git, MongoDB, HTML, CSS, SolidWorks, AVR, KiCad, DS9, Excel, Illustrator, Photoshop

> Other Eagle Scout, Mandarin proficiency, soldering, 3-D printing, picks great Slack reacts