

# BRANDON DAVID

<https://brandonhudavid.github.io>  
[brandonhudavid@berkeley.edu](mailto:brandonhudavid@berkeley.edu)

## EDUCATION

### University of California, Berkeley

Electrical Engineering & Computer Science  
Expected Graduation – May 2021

Relevant Coursework:

CS61A, *Structure and Interpretation of Computer Programs* (Python, SQL, Scheme)

CS61B, *Data Structures* (Java)

CS198, *Machine Learning* (Python) [intended]

EE16A, *Designing Information Devices and Systems I*

EE16B, *Designing Information Devices and Systems II*

Berkeley, CA

## SKILLS

Python

SQL

Java

C

Scheme

HTML

CSS

JavaScript

Photoshop

Illustrator

InDesign

Premiere Pro

Circuitry

Trilingual in spoken and written Chinese and Spanish

## PROJECTS

### Portfolio Website

 Web development - HTML, CSS, JavaScript, Photoshop

( <https://brandonhudavid.github.io> )

Website to exhibit software development and design portfolio. Written in HTML, CSS, and JavaScript. Graphics made with Adobe Photoshop. Features preloader, animations, and unique page flow.

### ImageColorSort

 Full stack - Python, Pillow, Tkinter, PyInstaller

( <https://github.com/brandonhudavid/ImageColorSort> )

Multi-functional image processing Python script with GUI that analyzes pixel hues within images. Compiled into MAC OS X application bundle with PyInstaller. Utilizes Pillow, a PIL fork, to dictionary pixel data and Tkinter, a GUI toolkit, to establish the user interface. The program's 3 modes allow users to find the most used color in an image, find the percent composition of a color in an image, and sort all images in a directory by a specific color.

### Yelp Mobile App Redesign

 User interface - Photoshop

( [https://brandonhudavid.github.io/img/BD\\_yelp.pdf](https://brandonhudavid.github.io/img/BD_yelp.pdf) )

Mock redesign of Yelp mobile app, includes subtle design changes to user interface while addressing redundancy and complications in buttons, pages, and features. Redesigned bottom menu layout, adjusted "Me" page to complement bottom menu, added functionality to "Nearby" page, restructured "Search" dropdown menu, removed nonessential buttons in side panel. Includes thorough write-ups for design changes.

### Robot Kinematics Programming

 Robotics - Java, Android Studio, C

( VEX: <https://github.com/brandonhudavid/nothing-but-net> // FTC: <https://github.com/brandonhudavid/whs-ftc-16> )

Head programmer for Team 542 Whitney High School Robotics; lead developer for competition code during VEX and FTC competition seasons. VEX programs written in C and received Think Award for most efficient and effective program at regional competition. FTC programs written in Java, utilizes Android Studio. Programs created for teleoperation, autonomous, drivetrain, and various subsystems.

## ENGINEERING

### UCLA Summer Research Program

Worked alongside UCLA graduate students in geotechnical engineering lab. Conducted research and analysis on the engineering properties of fine-grained soils. Began development of UCLA soil database. Recognized for best presentation in program of 50+ participants.

### Breadboards and Circuitry

Soldered metal components in order to build electronics in electrical engineering lab. Constructed multi-pixel cameras, touchscreens, and acoustic positioning systems using breadboards and circuits.

## DESIGN

### Innovative Design

Graphic design team member for UC Berkeley's largest design agency. Designs logos and advertisement publications for clubs and organizations on campus. Weekly meetings for draft critique and client consultation.

### Koncept Media

Marketing head, establishes branding guide and manages social media platforms for businesses in the Bay Area. Coordinates publicity campaigns to attract customers and employees. Maintains communication with businesses.