

# Yousef Helal

www.yousefh.org

yousefh@berkeley.edu

(617) 820-2585

## Education

---

### University of California, Berkeley

Junior, B.S. Electrical Engineering and Computer Science

- Overall GPA: 4.00/4.00

### De Anza/Foothill College

Transfer Student

- Overall GPA: 3.95/4.00

Berkeley, CA

Aug. 2021 – May 2023

Cupertino, CA

Sep. 2019 – Jun. 2021

Relevant Coursework: Database Systems, Data Structures and Algorithms, Linux System Administration, Circuit Analysis, Computer Architecture and Assembly Programming, Designing Information Devices and Systems, Discrete Math and Probability, Linear Algebra, Differential Equations

## Professional Experience

---

### Bay Area Community Resources

Remote

Software Engineer Intern

Oct. 2020 – Jul. 2021

- Developed a web-based educational game as part of Bay Area Community Resources' API-CHAT project, that seeks to educate users about the consequences of tobacco use.
- Collaborated with a team on research of game content, and proposed and led the use of Gatsby and React for development.

### De Anza College CS Department

Cupertino, CA

Teaching Assistant

Apr. 2020 – Jun. 2021

- Mentored students in classes with topics spanning Data Structures, C++, and Java.
- Aided students with assignments and questions, helped grade homework, and assisted in development of course material.

## Projects

---

### Git-inspired Virtual Control System

Jul. 2021

- Created a Java-based virtual control system, that incorporated a number of Git commands (add, commit, merge, etc.).
- Integrated a tree structure for project history, implemented branch merging, and made use of object serialization for saving repository state.

### All Chess

Nov. 2020

- Designed and implemented a Python-based discord bot that sets up chess games of different types, provides user rankings, and more.
- Won 2nd place @ IEEE Berkeley OpenHacks, and is currently supporting over 80 servers (with 10,000+ members in between all of them).

## Additional Experience

---

### DA Hack Organizer

Sep. 2020 - Oct. 2020

- Developed the site used for the hackathon, which may be found here: [www.dahack.dev](http://www.dahack.dev). Created using Gatsby and React, and is being hosted on Netlify.
- Assisted attendees with questions, and moderated hackathon platforms.

### Foothill College Clean Energy System

Oct. 2020 – May 2021

- Presented a clean energy system for Foothill College, as part of the Research Leadership Symposium.
- Delivered an emissions reduction of 80% at a cost cheaper than the current system, with a capital payback period of 23.0 years.

## Technical Skills

---

- **Programming Languages:** C++, Python, Java, JavaScript, HTML, CSS, SQL, Dart, Assembly (MASM)
- **Tools:** Flutter, React, Gatsby, Git, NumPy, OpenCV, Firebase (RT-Database, Auth, Functions)