Yousef Helal

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Education

University of California, Berkeley Berkeley, CA
Junior, B.S. Electrical Engineering and Computer Science *Aug. 2021 – 2023*

- Overall GPA: 4.00

De Anza/Foothill College Cupertino, CA
Transfer Student *Aug. 2019 – Jun. 2021*

- Overall GPA: 3.95

Relevant Coursework: Data Structures and Algorithms, Database Systems, Computer Programming, Circuit Analysis, Assembly Programming, 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 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, 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 Git commands.
- 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.

Additional Experience

DA Hack Organizer *Oct. 2020*

- Developed the site used for the hackathon, which may be found here: https://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.

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)