Yousef Helal

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Education

University of California, Berkeley Berkeley, CA
Junior, B.S. Electrical Engineering and Computer Science *Aug. 2021 – May 2023*
- Overall GPA: 4.00

De Anza/Foothill College Cupertino, CA
Transfer Student *Sep. 2019 – Jun. 2021*
- Overall GPA: 3.95

Relevant Coursework: Database Systems, Data Structures and Algorithms, Computer Programming, Linux System Administration, Circuit Analysis, Computer Architecture and 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 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 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 *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.

Techincal 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)