SUNAY DAGLI

(714) 363-1833 | sunaydagli.com | linkedin.com/in/sunaydagli | github.com/sunaydagli | sunaydagli@berkeley.edu

Objective

Highly organized and solution-oriented undergraduate passionate about the intersection between software development and impact-driven fields such as sustainability. I am authorized to work as a U.S. citizen. Currently seeking an academic research opportunity for Fall 2021 and/or Spring 2022.

Education

University of California, Berkeley - College of Engineering **Expected May 2023**

B.S. Energy Engineering, B.S. Electrical Engineering & Computer Science

Relevant Coursework:

- Structure and Interpretation of Computer Programs
- Data Structures
- Multivariable Calculus
- Designing Information Devices/Systems
- Discrete Mathematics and Probability Theory
- Linear Algebra and Differential Equations
- Energy and Society
- Great Ideas in Computer Architecture (Machine Structures)
- Efficient Algorithms and Intractable Problems
- Thermodynamics

Experience

Incoming Student Training in Engineering Program (STEP) Intern, Google **May 2021 - August 2021**

Academic Intern, UC Berkeley Electrical Engineering & Computer Sciences (EECS) **January 2021 - Present**

- Tutor about 50 students a week on topics such as asymptotic runtimes, graph algorithms, counting and comparison sorts, various data structures, and more while assisting in labs

Software Engineering Intern, Lawrence Berkeley National Laboratory **May 2020 - Present**

- Worked in the HydroGEN Data Hub team to combine non-proprietary experimental and computational data on advanced water splitting materials into searchable data infrastructure for 5 national laboratories and 30 funded projects
- Developed Python and web search platform, metadata parsers, and clean GUI using modern design principles to allow scientists to query a CKAN database to find and select data points and upload/download data; presented a poster of the project to faculty

Software Developer, Moev Inc. **May 2020 - August 2020**

- Established electric vehicle charging infrastructure determining the most scalable and economically deployable options for charging EV fleets by parsing through existing data and inputting it into a custom algorithm optimized for efficiency and cost-effectiveness
- Produced Python algorithm deliverables to use internally and for potential clients, such as the Los Angeles Department of Transportation, in an effort to transition to more eco-friendly transportation cost-effectively.

Energy Engineering Intern, UCLA Smart Grid Energy Research Center **June 2018 - September 2018**

- Remodeled and engineered a solar, wind, and battery-powered microgrid on Catalina Island, California, using data from UCLA
- Designed and developed a MATLAB Simulink simulation to determine the viability of the microgrid to remove diesel generators
- Established legitimacy for and improved the current state of energy-management; saved island time and resources
- Published a technical research paper and presented to UCLA faculty and Ph.D. candidates

Projects

InGameStats - Seamless GUI for Tracking Basketball Statistics

- Created Java GUI for basketball leagues to input real-time statistics and determine the best players and strategies to employ
- Optimized GUI for older coaches through a clean, functional, and easy to use user interface
- Deployed in North County Basketball and Yorba Linda Basketball recreational leagues as an accessory for coaches

Website for Masked Heroes Initiative Nonprofit

- As Chief Technology Officer, developed a website using HTML, CSS, and JavaScript for a nonprofit that I helped establish that donated over 20,000 masks through grassroots funding to combat COVID-19 spread, featured by L.A. Times and local congressmen

Skills

Languages: Python, Java, HTML, CSS, JavaScript, SQL, C

Platform/Tools: React, MATLAB, Pandas, NumPy, SciPy, Flask, Simulink, GUIs, IntelliJ, Eclipse, Git, Adobe Suite, Figma, Visual Studio Code, PyCharm, Microsoft Office Suite, LaTeX, Jupyter, CKAN, Bootstrap

Extracurriculars

Treasurer, Institute of Electrical and Electronics Engineers (IEEE) **August 2019 - Present**

- Managed and distributed $25,000 of funds to IEEE student-run courses, events, and activities
- Prepared and presented financial summaries of the organization's semesterly activities to the national branch of IEEE
- Supervised allocation of funds from the Associated Students of the University of California and Engineering Student Services

Mentor, Berkeley Engineers and Mentors (BEAM) **August 2019 - Present**

- Inspired and taught elementary-aged students through science experiments in an effort to provide equal STEM-education access to low-socioeconomic areas within Alameda County