# SUNAY DAGH

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sunaydagli

Highly organized and solutionoriented undergraduate passionate about the intersection between software development and impactdriven fields. I am authorized to work as a U.S. citizen.

### Skills

#### **LANGUAGES**

Python

Java

SOL

JavaScript

HTML

CSS

RISCV

x86

#### PLATFORMS/TOOLS

React

MATLAB

Simulink

Pandas Numpy

SciPv

Flask

Protocol Buffers

LaTeX Jupyter

Keras

Adobe Suite

Microsoft Suite

Tensorflow

REST API C3 AI Suite

# **Awards**

Institute of Electrical and **Electronics Engineers** Power and Energy Society

2021

**IEEE Power and Energy** Society Scholar

Southern California Edison

2019

Howard P. Allen Scholarship

Indian American Heritage Foundation

2019

· Academic Scholarship

#### Education

University of California, Berkeley

Electrical Engineering & Computer Science 2023

**Energy Engineering 2023** 

Relevant Coursework: Machine Learning, Data Structures, Designing Information Devices, Machine Structures & Computer Architecture, Efficient Algorithms and Intractable Problems, Artificial Intelligence, Operating Systems and Systems Programming, Electric Power Systems

### **Employment**

Google

Mountain View CA May 2022 to Aug. 2022

Aug. 2019 to Current

Software Engineering Intern

- Designed and implemented solutions to improve coverage and location for ride-share pickup points at airports for Google Geo
- Contributed to Java based API, edited ranking algorithm for points, and worked with servers and RPCs
- Complete development process including design docs, design reviews, and launching

Renewable & Appropriate Energy Laboratory - UC Berkeley

Berkeley, CA

Undergraduate Research Assistant

lan 2022 to Current

- · Developing Python implementations on a linear programming model, SWITCH, to introduce marine and tidal energy capacity for electricity sector
- Co-author of abstracts and documents for creating interactive data inventory of blue economy industries in the United States

#### UC Berkeley Hybrid Systems Laboratory

Undergraduate Research Assistant

Berkeley, CA Sept. 2021 to Jan. 2022

- Research on the project 'Navigating Autonomous Seaweed Growth Platforms by Leveraging Complex Ocean Currents
- · Utilize C3 Al platform to leverage complex ocean currents and machine learning to navigate solar-powered floating platforms for seaweed growth and carbon sequestration through open-sourced data, controllers, and path planning simulations

Google

Software Engineering (STEP) Intern

May 2021 to Aug. 2021

- · Created internal command line interface bridging Google Cloud infrastructures to obtain data about virtual machines
- Implemented Java and SOL based tools as well as a front-end web UI for table visualizations with Junit and end-to-end testing
- Simplified workflow for engineers by centralizing and automating debugging tasks
- Completed entire development process, including writing design docs, implementation, design reviews, and launching

#### Lawrence Berkeley National Laboratory

Research Assistant

Berkeley, CA May 2020 to May 2021

- · 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

Moey Inc.

Software Developer

Los Angeles, CA May 2020 to Aug. 2020

- Established electric vehicle (EV) charging infrastructure determining the most scalable and economically deployable options for charging EV fleets by parsing through existing data and optimization algorithms on efficiency and cost-effectiveness
- Produced Python algorithm deliverables to use internally and for potential clients in an effort to transition to more eco-friendly transportation cost-effectively

# **Projects**

InGameStats

- · Created Java GUI for basketball leagues to input real-time statistics and determine the best players and strategies to employ
- Deployed in North County Basketball and Yorba Linda Basketball recreational leagues as an accessory for coaches

Website for Masked Heroes Initiative

- · As Chief Technology Officer, developed a website using HTML, CSS, and JavaScript for a nonprofit that I helped establish
- Enabled donations of 30,000 masks through grassroots funding to combat COVID-19, featured by L.A. Times and congressmen

### **Activities**

Institute of Electrical and Electronics Engineers (IEEE) Student Branch · President

May 2021 to Current

· Established and implemented overall IEEE visions, operations, and activities through leadership meetings, professional development events, research and company fairs, and team projects for over 200 general members

Assisted in management of two student-run courses: introductory robotics (Micromouse) and Hands-on PCB Design

Developed positive relations with University of California affiliated organizations and IEEE Nationals

Berkeley Engineers and Mentors · Mentor

Aug. 2019 to Current

 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