

EXPERIENCE

UC Berkeley EECS — CS70 Academic Intern

June 2020 - Present

Helps students increase their understanding of subject matter by assisting during discussion sections and explaining problem solving concepts. Teaches topics including mathematical proofs, cryptography, Markov chains, and probability.

Lodi Unified School District — High School AVID Tutor

January 2018 - May 2019

Tutored high school sophomores and juniors in academic questions from both high school and college level coursework, especially in mathematics.

EDUCATION

University of California Berkeley, Berkeley — Double Major Computer Science and Mathematics

August 2019 - May 2023 (expected) - 3.94 GPA

Courses:

- Structure and Interpretation of Computer Programs
- Linux System Administration
- Data Structures
- Designing Information Devices and Systems I/II
- Discrete Mathematics and Probability Theory

SCHOOL PROJECTS

Gitlet

- Wrote Java code to save and restore codebases with control over individual files and commits.
- Optimized program to use the least amount of resources possible with each operation.
- Implemented features to allow the separation of codebases into different branches.
- Provides the ability to intelligently merge branches based on commit history of each branch.

Scheme Interpreter

- Wrote software to parse and convert Scheme expressions into Python.
- Implemented Tail Call Optimization to improve performance when utilizing recursion.

PROJECTS

AJA Messenger (Android Messaging App)

- Implemented a Naive-Bayes classifier to filter and separate spam messages with a high degree of accuracy.
- Based on the open-source messaging app Mesibo
- Created during CalHacks 6.0

Todo List

- Used React.js and Material-ui to create a modern and functional frontend to add, categorize, and view tasks.
- Made a backend using Node.js and Express that stores tasks in MongoDB to make them accessible from anywhere.
- Integrated Auth0 for secure user management and authentication to keep tasks private.

EXTRACURRICULAR ACTIVITIES

Open Computing Facility — Staff

August 2019 - Present

Staff at the OCF, a space dedicated to providing free computing resources to the Berkeley community with FOSS software.

SKILLS

Python Java Linux Scheme MySQL HTML CSS JS jQuery React.js Node.js Express MongoDB Bootstrap

LINKS

Space Enterprise at Berkeley — Avionics Engineer

August 2019 - Present

Worked on avionics systems for SEB rockets, including telemetry communication between rocket systems and ground station as well as on-rocket sensor monitoring.

Photographed IEEE events and edited and posted these pictures to IEEE social media.

IEEE Student Branch, UC Berkeley — Director of Marketing

August 2019 - May 2020

Created graphic designs and drafted newsletters to promote IEEE events among the student population.

Photographed IEEE events and edited and posted these pictures to IEEE social media.

LINKS

github.com/origamiman72

linkedin.com/in/abhik-ahuja

abhikahuja.com

SKILLS

Python

Java

Linux

Scheme

MySQL

HTML

CSS

JS

jQuery

Tensorflow

React.js

Node.js

Express

MongoDB

Bootstrap

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