# **Blayden Christian Lee**

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Berkeley, CA

**Graduation: May 2023** 

### **Education**

# University of California, Berkeley

Bachelor of Arts, **Data Science** and **Computer Science** 

Relevant Coursework: Structure and Interpretation of Computer Programs, Data Structures & Algorithms, Foundations of Data Science, Discrete Math & Probability Theory, Human Contexts and Ethics of Data

## **Work Experience**

# **UC Berkeley Electronic Engineering and Computer Science Department**

June 2021 – August 2021

Academic Intern

Berkeley, CA

- Aided in teaching biweekly sections of 20+ students to facilitate academic growth and develop critical thinking skills resulting in a lab completion rate of over 90% for all students
- Taught core data structures concepts such as linked lists, trees, graphs, hashing, searching algorithms, sorting algorithms, and asymptotic analysis

### **UCSF Prostate Cancer Research Lab**

July 2018 - September 2018

Research Intern

San Francisco, CA

- Conducted research with the Department of Urology on mutations in the COMT gene and p53 protein in order to understand the difference in rates of prostate and pancreatic cancer between African American and Caucasian men which resulted in identifying a compound capable of stopping the spread of cancer in mice
- Assisted in genotyping and managing the lab's mouse colony every week which is essential for all lab experiments

# **Projects**

## **Path Finding Visualization App**

May 2021 - August 2021

- Created a user interface that allowed users to tap two points on a grid and visualize the shortest path between those two points after choosing a specific search algorithm
- Implemented Dijkstra's algorithm, A\* search algorithm, and breadth-first search using Swift

### **Distributed Version Control System**

March 2021 - April 2021

- Built a version-control system with Java, similar to Git, with the ability to save the contents of files and directories, restore previous versions of one or more files, view the history of backups, maintain different branches of files, and merge changes made in different branches
- Implemented the branch merging system by using Dijkstra's algorithm to find the nearest shared parent commit
- Stored files and content with a SHA-1 hash function as well as development on remote features

### Lisp Interpreter

November 2020 – December 2020

- Created an interpreter for the Lisp language in Python capable of interpreting user-defined functions and procedures
- Implemented a read-eval-print loop (REPL) in order to parse user input, evaluate and run the interpreted command, and print the string representation of the obtained value

## **Volunteering & Leadership**

### Future Business Leaders of America - Phi Beta Lambda

August 2021 - Present

Technological Analyst

Berkeley, CA

- Implemented technical projects in a business and consulting organization geared towards technical development
- Developed tools for data analytics and web development using Python and HTML/CSS

### **Asian American Association**

August 2019 – Present

Graphic Designer

Berkeley, CA

- Organized, participated, and led community service projects for an organization of 500+ students
- Designed graphics using Adobe Illustrator for organizational flyers, logos, and stickers in order to promote events, raise funds, and recruit members

### **Boy Scouts of America**

September 2017 - November 2018

Eagle Scout Project Coordinator and Leader

San Francisco, CA

- Coordinated, designed, and led a facility restoration project for a San Francisco medical therapy unit which included refurbishing the front entrance, the backyard playground, and basketball court of the medical therapy unit
- Negotiated over a 12-month period with the San Francisco Board of Education and property manager over the feasibility and legality of the project

## **SKILLS & INTERESTS**

Languages: Python, Java, SQL, Scheme, Swift, LaTeX

**Skills:** Microsoft Word, Microsoft PowerPoint, Adobe Illustrator, Adobe Photoshop, Rhino 3D

Interests: Tennis, Digital Art, Hiking & Backpacking, Camping, Design, Traveling