# Sean Lam

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### Education

### University of California, Berkeley | Berkeley, California

August 2017 - May 2021

**Bachelor of Science** – Electrical Engineering and Computer Science | GPA – 3.41 | Regents' and Chancellor's Scholar **Relevant Coursework** 

 Data Structures, Computer Architecture and Machine Structure, Discrete Math and Probability Theory, Algorithms, Principles and Techniques of Data Science, Computer Security, User Interface Design and Development, Database Systems, Operating Systems and System Programming, Artificial Intelligence

#### **Awards**

• Eagle Scout – Boy Scouts of America

Jan. 2017

### Leadership

### Computer Science 61B Course Staff | UC Berkeley

**Academic Intern** 

Jan. 2019 – March 2019

- Supported over 1000 enrolled students by assisting in coursework, lab, and conceptual understanding
- Gained deeper understanding of Java, unit testing, data structures, runtime analysis, and basic algorithms

### Regents' and Chancellors Scholars Association | UC Berkeley

### Media and Marketing Coordinator

Sept. 2017 - Present

- Lead a committee in charge of creating promotional material to publicize various club events to over 800 scholars
- Organized workshops to teach students how to use Adobe Creative Cloud

## Experience

### Full Stack Engineering Intern | Anytrek Corporation

June 2019 - August 2019

- Streamlined business processes by automating orders and payments through online portal
- Implemented core features of the Internal Management System including order and invoice handling
- Utilized modern frameworks to create a more versatile and interactive experience
- Node.js/Vue.js frontend and Java/SQL/Spring Boot/Redis backend using Apache Maven

## **Projects**

# MOOCbase

Sept. 2020 – Nov. 2020

- Implemented a functioning relational database using Java and knowledge gained from Database Systems course
- Involves various parts of a database such as B+ trees, Relational Algebra, Joins, Query Optimization, Concurrency
- Learned valuable skills in data systems and further developed my algorithmic thinking

#### Trip Planner

Nov. 2018

- Created a graph package using Java data structures and algorithms such as BFS, DFS, Dijkstra's, and A\*
- Utilized the graph package to create a trip planner to find the best route between two cities

#### The Game of the Amazons

Oct. 2018

- Implemented a two-player abstract strategy game using Object Oriented Programming and Data Structures
- Created an AI player that "thinks" 5 steps ahead utilizing a custom heuristic and alpha-beta pruning

### Skills

- Java, Python, C, MATLAB, SQL, Android SDK
- Object Oriented Programming

- Unix and Git
- Testing and Debugging
- HTML, CSS, JavaScript
- Adobe Creative Cloud

- Adaptation
- Teamwork
- Communication
- Self-Motivation