Max X. Lin

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EDUCATION

**UC BERKELEY**

B.A. Computer Science

Expected May 2021

GPA: 3.708 / 4.0

SKILLS

**PROGRAMMING**

Java • Python • C • C++ • Go •

PostgreSQL • HTML • CSS

COURSEWORK

**CURRENT**

CS162: Operating Systems

CS294-170: Cloud Computing

**COMPLETED**

CS189: Machine Learning

CS188: Artificial Intelligence

CS186: Databases

CS184: Computer Graphics & Imaging

CS170: Efficient Algorithms

CS168: Internet Protocols

CS161: Computer Security

CS70: Discrete Math & Probability

CS61C: Machine Structures

CS61B: Data Structures

CS61A: Structure & Interpretation of Computer Programming

Data100: Principles and Techniques of Data Science

Data8: Foundations of Data Science

EE16A/B: Designing Information Devices and Systems I/II

Math54: Linear Algebra

Math53: Multivariable Calculus

LINKS

GitHub: github.com/xmaxlin

LinkedIn: /in/maxxianglin

Website: xmaxlin.github.io

EXPERIENCE

**Amazon** | Software Development Engineer Intern

May 2020 – August 2020 | Seattle, WA

* (in progress)

**UC BERKELEY EECS** | Tutor

June 2019 – August 2019 | Berkeley, CA

* Worked as a member of course staff for CS61C (Machine Structures)
* Gave mini-lectures in discussions and created content review worksheets
* Taught C, RISC-V, CPU Datapath Design & Pipelining to groups of 5 & 10 students
* Created tutoring videos going over Caches, Data-Level Parallelism, and VM

**Computer Science Mentors**  | Junior Mentor

February 2019 – May 2019 | Berkeley, CA

* Served as a junior mentor for CS61C (Machine Structures)
* Provided one-on-one tutoring services to struggling students
* Gave weekly mini-lectures and went over worksheets with a section of 6 students

PROJECTS

**Secure Storage System** | CS161 Project

* Designed an encrypted online storage system in Go that upholds privacy and enables secure file sharing and file access revocation amongst users.
* Used HMAC-based encryption and Argon2 password hashing to secure user and file data on potentially malicious and unsecure datastore.

**GuavaBot Routing** | CS170 Project

* Created a Python routing algorithm that finds lost objects with an adversary
* Used NetworkX’s Steiner Trees and a multiplicative weight framework (based on adversary) to find lost objects and route to a home node efficiently

**Bear Maps** | CS61B Project

* Implemented a Java mapping application of Berkeley inspired by Google Maps
* Designed using A\* algorithm in Java using the great-circle distance as a heuristic
* Supported map rasterization and zoom using quadtrees
* Implemented name-search autocompletion capabilities with Trie trees

AWARDS AND HONORS

May 2019 1st Place CS170 GuavaBot Algorithms Competition

April 2017 1st Place PiE High School Robotics Competition