

Richard Hu

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EDUCATION

UC BERKELEY

B.S. IN ELECTRICAL ENGINEERING
AND COMPUTER SCIENCE

May 2022

College of Engineering

GPA: 3.9 / 4.0

Eta Kappa Nu (HKN) EECS Honor Society

COURSEWORK

BERKELEY

Data Structures

Efficient Algorithms and Intractable
Problems

Probability and Random Processes

Introduction to Artificial Intelligence

Discrete Mathematics and Probability
Theory

Machine Structures

OTHER

Linear Algebra

Machine Learning

SKILLS

LANGUAGES

Advanced:

- Java
- Python

Familiar:

- C
- C++
- SQL

SOFTWARE

- Git
- PyTorch
- Unix-like operating systems

OTHER

- Unit and integration testing
- \LaTeX
- Statistics and probability
- Machine learning

EXPERIENCE

BERKELEY EECS DEPARTMENT

UNDERGRADUATE STUDENT INSTRUCTOR (UGSI)

June 2020 – Present | Berkeley, CA

- Teaching discussion sections of 40 students twice a week and holding weekly office hours for Discrete Mathematics and Probability Theory
- Contributing to weekly staff meetings with professors and other uGSI's to create plans for incoming weeks

PROJECTS

CHES AI | JUNE 2020 - PRESENT

- Developing a Chess AI in Java that plays using a multi-threaded Monte Carlo tree search with a random rollout policy
- Current single-threaded AI **capable of beating top-1000 ranked players** on Daily mode on [chess.com](#)

LINES OF ACTION | MARCH 2020 - APRIL 2020

- Implemented Lines of Action board game in Java playable via command line or GUI using AWT and Swing
- Optimized an alpha-beta pruning game tree search heuristic that **won 2nd place** in 500-entrant tournament

SILAS | OCTOBER 2019 - DECEMBER 2019

- Created linear algebra command line utility using Python and NumPy to help students visualize computations in EECS 16A
- **Substantially improved** many users' understanding of elementary matrix operations

HEX ROCKETS | SEPTEMBER 2018 - JANUARY 2019

- **Collaborated with team of friends** to develop and maintain a Java cross-platform mobile game teaching hexadecimal arithmetic
- **Won the Congressional App Challenge** and received over **500 installs** across iOS and Android with **primarily 5-star reviews**