

William Lin

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EDUCATION

University of California, Berkeley

May. 2023

Electrical Engineering and Computer Science Major

Regents & Chancellor's Scholarship Recipient, Eta Kappa Nu Member

GPA: 4.0

Relevant Coursework: Algorithms, Complexity and Computability, Machine Learning, Operating Systems, Combinatorial Algorithms, Computer Security, Computer Architecture

WORK EXPERIENCE

CS 70: Discrete Math and Probability Theory Course Staff

Jun. 2020 - Present

Undergraduate Student Instructor (Jan. 2021 - Present), Reader (Jun. 2020 - Dec. 2020)

- Teaching discussions twice a week on discrete math and probability
- Holding office hours to assist students with learning course material
- Meeting weekly with course staff to improve discussion material
- Assisted instructors with grading homeworks

Hibotics

Feb. 2016 - Jan. 2019

Software Engineering Intern

- Developed Android app as control system and UI for ERAD product
- Interfaced controls to work with both Arduino or Raspberry Pi through MQTT protocol

SELECTED PROJECTS

End to End Encrypted File Sharing System (Golang)

November 2020

- Designed file sharing system supporting uploading, appending, sharing, and deleting files
- Implemented encryption system for file/user data using AES-CBC, and RSA, as well as error/modification detection to files using HMACs.

Approximation to Modified Version of Dominating Set (Python)

May 2020

- Programmed polynomial time algorithm for NP-complete problem dominating set, conditioned on minimizing average pairwise distances of vertices.

Gitlet (Java)

May 2020

- Built a simplified version of Git version control system tracking file changes and updates
- Implemented functions for saving directories, keeping track of branches, and merging branches.

ACTIVITIES

Robotics @ Berkeley

Sep. 2019 - May 2020

Self Driving Car Simulator Team Member

- Creating reinforcement learning model of Amazon DeepRacer car in simulations
- Working on Computer Vision system to detect lanes and obstacles

SKILLS

Languages: Java, Python, C, Assembly (RISC V), HTML, CSS, Scheme, SQL, MATLAB, Golang

Further Education: Coursera Certifications in Neural Networks and Deep Learning, Convolutional Neural Networks, and Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization