

Education

University of California, Berkeley

B.S., degree anticipated 2021

Major: Electrical Engineering and Computer Science

GPA: 3.97 / 4.00

* In Progress † Graduate-level

CS Courses: Data Structures, Algorithms, Discrete Math and Probability Theory, Computer Architecture, Operating Systems, Compilers, Artificial Intelligence, Machine Learning, Intro to Teaching CS, *Computer Security

EE(CS) Courses: Designing Information Devices and Systems, Digital Design and Integrated Circuits (FPGA Lab), *Optimization, †Hardware for ML

Experience

NVIDIA | Architecture Intern (Summer 2020)

- Returning intern in the Tegra System Architecture group
- Used ML methods to predict CPU cost of networking workloads to within 15% accuracy

NVIDIA | Architecture Intern (Summer 2019) | [nvidia.com](https://www.nvidia.com)

- Modeled SoC use cases as part of the Tegra System Architecture group
- Dynamically estimate power data based on task scheduling and per-IP workload parameters
- Analyzed and visualized power data in Python/SciPy/NumPy

Oski Technology | Formal Verification Intern (Summer 2018) | oskitechnology.com

- Wrote test plan and coded checkers and constraints to formally verify an RTL design
- Learned and utilized the HDLs Chisel and SystemVerilog, as well as JasperGold for formal verification
- Interfaced regularly with customer to facilitate product understanding and clarify scope of project

U.C. Berkeley Computer Science Department | Undergraduate Student Instructor (Fall 2018–Fall 2020)

- Fa18/Sp19: Taught weekly 90-minute discussion sections and labs for 30+ students and host office hours for CS 61A (programming fundamentals course)
- Fa19/Sp20: Similar responsibilities for CS 61C (computer architecture)
- Fa20: FPGA lab TA for EECS 151 (digital design)
- Create and review course content including exam questions, discussion worksheets and slides, homework/lab assignments, and supplementary materials.

Skills

- **Programming:** Python, Java, C, (System)Verilog; version control (Git, SVN, Perforce)
 - Familiar with Chisel, RISC-V, HTML/CSS, JavaScript, SQL, Scheme, NumPy, Pandas
- **Language:** English (native), Korean (working proficiency), Spanish (elementary proficiency)

Activities and Awards

Pioneers in Engineering | Project Manager (2020-21), Director of Engineering (2019-20), Project Manager (2018-19), Software Developer (2017–18) | pioneers.berkeley.edu

- 2020-21: Leading new team building a robot simulator web app to aid robotics competition participants with design of robot and test of robot code
- 2019-20: Led software development in a club of 50+, including 5 software teams, serving 200+ high schoolers
- 2018-19: Managed project team developing robotics competition UI elements and software handling field state
- 2017-18: As a developer, implemented interprocess and interdevice communication into the field control state machine, and designed robotics competition scoreboard using HTML, CSS, and JavaScript

Computer Science Mentors | CS 61A Junior Mentor (Spring 2018) | csmberkeley.github.io

- Held weekly group tutoring sessions and met with students individually to provide support

U.C. Berkeley College of Engineering | Dean's List (Fall 2017–Spring 2019)

- Further status unclear due to changes in campus policy

U.C. Berkeley | Edward Frank Kraft Award for Freshmen (Fall 2017)

U.C. Berkeley IEEE-HKN (EECS Honor Society) | Member (Fall 2018–present)