Charles Hong

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Education

University of California, Berkeley
B.S., degree anticipated 2021
Major: Electrical Engineering and Computer Science
GPA: 4.00/4.00

* In Progress

CS Courses: Structure and Interpretation of Computer Programs, Data Structures, Discrete Math and Probability Theory, Computer Architecture*, Algorithms*, Artificial Intelligence*, Intro to Teaching CS

EE Courses: Designing Information Devices and Systems I/II

Experience

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 HDLs such as Chisel and SystemVerilog and tools such as JasperGold for formal verification
- Collaborated in person and remotely on test bench development and code with coworkers in multiple countries
- Interfaced regularly with customer (SiFive) to facilitate product understanding and clarify scope of project

U.C. Berkeley Computer Science Department | Undergraduate Student Instructor, CS 61A (Fall 2018)
- Teach weekly 90-minute discussion sections and labs for 30+ students and host office hours for CS 61A (programming fundamentals course)
- Create and review course content including exam questions, discussion slides, lab assignments, and supplementary materials

Skills

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

Activities and Awards

Pioneers in Engineering | Staff Member (2017–18) and Project Manager (2018-19) | pioneers.berkeley.edu
- Lead project team in developing software that manages robotics competition UI elements and field state
- Utilized LCM communications protocol in Python to build interprocess and interdevice communication into the field control state machine
- Designed and implemented robotics competition scoreboard using HTML, CSS, and JavaScript
- Worked with Business Operations group to raise funds towards an over $50,000 budget by contacting and gaining sponsorships from local companies

Computer Science Mentors | CS 61A Junior Mentor (Spring 2018) | csmberkeley.github.io
- Held weekly group tutoring sessions
- Met with students individually to provide extra support

U.C. Berkeley Computer Science Department | Academic Intern, CS 61A (Spring 2018)
- Tutored and assisted students in labs and office hours

Game Design Club | Co-founder (2015) and president (2016–17)
- Guided members in developing games for iOS/Android in Unity
- Collaboratively released games on Google Play Store

ACE Coding | Volunteer (2014), Teacher (2016–17) | acecoding.org
- Volunteered to teach principles of coding through Scratch and Java to over 25 local middle schoolers in weekly after-school program
- Helped run "Code Day" event with several hundred participating

Pleasanton Nursing and Rehabilitation Center, The Parkview Assisted Living and Memory Care | Activities Volunteer (2015–17)
- Coordinated with activities director to plan and prepare for special events
- Assisted residents with memory care activities

U.C. Berkeley College of Engineering | Dean's List (Fall 2017–Spring 2018)

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

National Merit Finalist (2017)

United States Department of Education | Candidate, U.S. Presidential Scholars Program (2017)