Kai Huang

(510) 780-6953 • kaihuang@ucsc.edu • kaihuang97.github.io

EXPERIENCE

Jack Baskin School Of Engineering, University of California   Santa Cruz, CA
System Logic Design Lab Teaching Assistant
Computer Systems and Assembly Lab Teaching Assistant   *January 2018 – present*
· Collaborate closely with professor to facilitate lab discussion and small group tutoring sessions focusing on sequential circuits, finite-state machine design, and fundamentals of computer systems
· Assist groups of students in debugging C, Verilog, MIPS, LC-3 code

Kuya-Ate Mentorship Program   Santa Cruz, CA
Co-Coordinator/Financial Representative   *July 2017 – present*
· Program and facilitate workshops, focusing on academic, social, and cultural retention, to cater to community of 300+
· Reserve venues, fulfill purchase order forms and event proposals, manage monthly budgeting

Play-Well TEKnologies   Piedmont, CA
Assistant Instructor   *June 2015 – September 2015*
· Instructed robotic engineering concepts using Legos to children in primary school
· Explored basic computer programming concepts using NXT 2.0 and EV3 software

HARDWARE PROJECTS   *SOFTWARE PROJECTS*

Proximity Sensor
· Allowed ultrasonic module to generate an echo waveform, with width of wave corresponding to the distance away from the sensor
· Using sleep functions and MOSFETs to cut power to the sensor in between measurements, reducing power consumption by 85%

Dual-Channel Waveform Generator
· Phases of waveforms are controlled using potentiometer and displayed on LCD display using Cypress PSoC microcontroller

Amazon Deal Notifier (in progress)
· Script utilizing Amazon's Product Advertising API
· Email an alert whenever a price drop occurs on a desired Amazon item

Local Weather
· Displays the weather using the user's geolocation
· Random wallpaper is chosen depending on the state of the weather

Weightlifting Plate Calculator
· Designed an algorithm to find the optimal number of plates for a desired weight to place on barbell

ACADEMICS

University of California, Santa Cruz   Santa Cruz, CA
Bachelor of Science: Computer Engineering
Bachelor of Arts: Computer Science   *September 2015 – June 2019 (expected)*
· University GPA: 3.92/4.0
Honors
· Tau Beta Pi, Engineering Honors Society

Relevant Coursework
· Data Structures and Algorithms   · Electronic Circuits   · Microprocessor Design
· Operating Systems   · Electronic Signals and Systems · Assembly Language
· Computer Architecture   · System Logic Design

TECHNICAL SKILLS

Strong: Java, C, C++, HTML/CSS, JavaScript, Git, UNIX, Python, Verilog, MATLAB, Octave