

Kai Huang

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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

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 33%

Dual-Channel Waveform Generator

- Phases of waveforms are controlled using potentiometer and displayed on LCD display using Cypress PSoC microcontroller

SOFTWARE PROJECTS

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