Christian Setiawan

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EDUCATION

University of California, Davis

De Anza College (Transfer)

B.S. Electrical Engineering

Overall GPA: 3.2/4.0

Expected Grad: June 2018

SKILLS

Circuit Design Software/Tools

- Altera Quartus, ModelSim
- Breadboard Prototyping
- Cadence OrCAD
- DMM, Oscilloscope, Soldering
- Function Generator
- PCB Design, EAGLE
- PSpice Advanced Analysis
- VirtualBench

Programming Languages

- C/C++
- Python
- Java
- Verilog
- MATLAB Assembly

Languages

- Engineering Technical Writing
- Mandarin (Spoken)
- Indonesian (Spoken)

COURSEWORK

- Analog Circuits I II
- Autonomous Vehicle Project
- Computer Architecture
- Device Physics I
- Digital Systems I II
- Electromagnetics I
- Object-Oriented Prog. in C++
- Problem-Solving with C Prog.
- Technology Management

ACTIVITIES

Theta Tau - Professional **Engineering Fraternity**

June 2016 - Present

Institute of Electrical and **Electronics Engineers (I.E.E.E.)**

January 2016 – Present

EXPERIENCE

Hardware Engineer Intern | S&C Electric Company

Alameda, CA

June 2017 - September 2017

- Engineered an OrCAD Capture template that made company parts compatible with PSpice Advanced Analysis, assisting in the development and validation of new and existing circuitry.
- Improved Design For Reliability Plan by identifying critical factors that minimize component failure.
- Integrated over 100 parts in future prototype schematics with de-rating and tolerance parameters.

Electronics Engineer Intern | US Department of Defense - Defense Microelectronics Activity McClellan, CA October 2016 - April 2017

- Manufactured integrated circuit wafers with four engineers in a semiconductor fabrication lab.
- Boosted lab efficiency by collecting data from metrology tools and by optimizing test conditions and variables, resulting in decreased experiment time and increased diffusion yield on wafers.
- Conducted a daily quality check of over 100 components, equipment, and gases in two facilities.

Computer Technician | University of California, Davis - College of Engineering April 2016 - October 2016 Davis, CA

- Administered technical support to full biomedical engineering faculty and graduate student body.
- Resolved over 200 tickets as first point of contact, reducing overall ticket wait time by over 50%.
- Worked with two technicians to repair AV equipment, faulty computers, hard drives, and printers.

PROJECTS

Autonomous Vehicle Senior Design Project

September 2017 - Present

- Building a self-driving race car in a group of three for a nation-wide competition using power MOSFETs, low-dropout voltage regulators, a servo motor, a DC motor, and a bluetooth controller.
- Programming an OpenMV M7 Camera microcontroller in Python to detect the race track, avoid obstacles, and generate PWM output signals to control a servo in order to automate car steering.
- Manufacturing a custom 2-layer printed circuit board and corresponding Bill of Materials on Eagle.

Verilog FPGA Traffic Light Controller

April 2017 – June 2017

- Developed a traffic light simulation that is controlled using an Altera DE-10 Lite FPGA board.
- Designed a finite state machine using Verilog to implement flip-flops, registers, and counters.

Multicolor LED Greek Letter Banner

April 2016 – June 2016

- · Constructed a banner's circuit schematic that displays Greek letters using soldered LED components, which are controlled using a Bluetooth remote.
- Used during recruitment week and events to showcase past fraternity engineering projects.

MATLAB Video Processing Player

January 2016 – March 2017

 Coded a video player with working GUI with the ability to search for video files from computer with buttons for play/pause, stop, forward, back, a real-time scroll bar and an RGB histogram.

LEADERSHIP

Vice President, External Relations Chair | Theta Tau - Professional Engineering Fraternity June 2016 - June 2017 Davis, CA

- Oversaw new member initiations, officer elections, and weekly meetings of over 40 members.
- Communicated with National Office board members to organize a UC Davis Western Regional Conference, where over 100 student members from 13 chapters attended.
- Enforced risk management, maintained conflict mediation, and hosted team-building events.