

Andrew H. Kim

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OBJECTIVE

Highly motivated Electrical Engineer looking for an opportunity to become grow professionally. Interested in strengthening skills in leadership, innovation and teamwork working for Senior Engineers to master the fundamental of engineering.

EDUCATION

California State Polytechnic University, Pomona

March 2017

Bachelor of Science, Electrical Engineering GPA: 3.03

RESEARCH/PROJECT EXPERIENCE

Electronic Communication Systems

March 2016

- Strengthened knowledge in theory of the design and analysis of communication systems utilizing laboratory instruments.
- Learned characteristics and applications of modulation types and different techniques for signal processing/analysis.
- Implemented PPL demodulator to test its functionality using receiver and sound amplifier.

Power Electronics

March 2016

- Strengthened my knowledge on power electronic circuits to convert electric power from one form to another.
- Emphasis on DC power supplies and DC-DC converters to regulate an output voltage of system.
- Developed a simulated buck converter model utilizing PSpice and MATLAB programs to analyze the voltage and currents with various phase angles.

WORK EXPERIENCE

California Department of Transportation, District 7, Program/Project Management

June 2016 – March 2017

Engineering Student Assistant

- Provided electrical support to the Engineers to support their operations such as mapping, inputting, identifying, and correcting errors in various Program Management databases.
- Assisted with database-conversion projects including data extraction, data conversion, integration, and analysis to streamline reports for Engineers.
- Developed solutions to create effective reports and agreements using both Microsoft Excel and Word for both the department and third parties.
- Record and proof read documents according to the filing system requirements.

PROJECTS

Development, Testing, and Implementation of Vehicle to Grid Functionality

June 2016

- Designed an Inverter with non-intrusive control systems (NCS) to allows few functions for Electric Vehicles
- Charge/discharge the vehicle battery under the request of grid operators to reduce stress conditions in the power grid
- Designed a control to connect and disconnect automatically and allow user to set schedule for charge and discharge

Automatic Control of Street Light

- Implemented the circuit equivalent to the street light, with turn signals, timer for pedestrians and buzzer.
- Utilized microcontroller to program the circuit to have multiple light patterns to demonstrate its automation.

ACHIEVEMENTS

- Won 1st place in the 4th Annual Cal Poly Pomona Research, Scholarship, and Creative Activities Conference.
- Participated in Student Research Conference hosted in CSU Bakersfield in 2016.

SKILLS

Design: Proficient in MATLAB/ Simulink, FPGA, AutoCAD, PSpice, LabView, Xilinx Design Tool, Cadence Virtuoso

Programming Language: C++, Verilog, VHDL

Test Equipment: Oscilloscope, Spectrum Analyzer, Multimeter, Signal generator

Others: Proficient in Microsoft Office, Linux, Bilingual in English/Korean