
David Santiago

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CMOSedu.com/jbaker/students/david/david.htm

1719 Leonard Lane, Las Vegas, NV 89108

SUMMARY:

Electrical Engineering Student at UNLV. Has done 1 year of practical research in circuit design using LTspice, data analysis using MATLAB, and printed circuit board design using EAGLE. Supportive, flexible, and determined.

EXPERIENCE:

Undergraduate Research Engineer – January 2019 – Present

- Research for Dr. R. Jacob Baker at UNLV, focusing on data analysis and circuit design
- **Projects:**
 - o Low Power Two-Stage Amplifier:
 - An amplifier that will take in a small AC signal from a cell phone and amplify it into a speaker, all while using a 9V battery and using less than 1mA current.
 - o MATLAB-To-GPIB Photon Counting:
 - A tutorial on how to connect a Stanford Research (SR) Systems Instrument and a Keithley Source-meter to MATLAB using IEEE-488 GPIB (General Purpose Interface Bus). The instruments are then automated for data collecting and are all controlled using a GPIB controller.
 - o Design of Printed Circuit Boards:
 - Small schematic projects that are created for testing integrated circuits and designed using EAGLE. Printed circuit boards are then fabricated and used for research.
 - o The Boost Switching Power Supply using Virtuoso Cadence:
 - A circuit designed in Cadence that will use an NMOS switch, 3.75-5.25V power supply and inductor to produce a constant 7.5V output that will drive loads up to 20mA. Has feedback system that will implement hysteresis to create a higher efficiency.
 - o More Projects with pictures and details can be viewed at:
 - CMOSedu.com/jbaker/students/david/david.htm

Vice-President of Tau Beta Pi, The Nevada Beta Chapter – Fall 2019 – Present

- Does the negotiating with other representatives of Tau Beta Pi, held an Initiation, and bringing back the spirit of Honor Engineering by reviving The Bent with a new red color and brass polishing.

Trumpet Player with the Clark HS Marching Band – 2012 – 2016

- Played at multiple marching competitions, Las Vegas Parades, and small events.

EDUCATION:

University of Nevada, Las Vegas – B.S. in Electrical Engineering, May 2020.

GPA: 3.57

REFERENCE:

Dr. R. Jacob Baker – rjacobbaker@gmail.com – (702)-895-4125

More references available upon request