



# Jake Millhiser

## UCSD Electrical Engineering

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### Objective

Electrical Engineering undergraduate seeking to apply technical and professional skills to company projects and research. Has two years of studying electric circuits, linear analysis, and programming which have been applied to personal projects.

### Key Skills

<b>C &amp; MIPS Programming</b>	Have taken a course in C programming and MIPS assembly. Written programs like a terminal Minesweeper, and an incomplete version of PONG using SDL2 libraries (and some C++). Have written a Python program to calculate and graph the capacitance of a square capacitor given voltage and plate size. Have written a quicksort procedure in the MIPS R2000 assembly language.
<b>Circuit Analysis</b>	Have taken multiple courses in circuits, with an understanding of basic circuits like clippers, amplifiers, peak detectors, and rectifiers. Used concepts of signal shaping in creation of guitar pedals.
<b>Public Speaking</b>	Have given many speeches throughout my life that had great reception. This includes one for my high school's salutatorian speech, and one at Sizzler for my high school's student of the month.
<b>Familiar with Linux/Unix</b>	Primarily use a Linux operating system. Familiar with many unix commands like: grep, head, tail, and echo. Understand how to chain commands together using a pipeline.
<b>LaTeX and Microsoft Office</b>	Understand how to use LaTeX and Microsoft Office. Know how to create a table and plot in Excel. Know how to use basic Excel functions like SUM and AVERAGE.
<b>Familiar with Git</b>	Have used git to do collaborative programming projects with others. Familiar with commands like pull, push, add, stage, and commit.

### Work Experience

Summer 2017	<b>Warren College Move-In Assistant</b> Helped UCSD students move into their dorms and apartments. This included managing parking, directing people to campus locations, and giving out room keys.
Summer 2016	<b>Heroes on the Water Volunteer</b> Helped setup a day-long kayak fishing trip for veterans and helped prepare lunch/dinner for them afterwards.
Summer 2015	<b>Hemet Public Library Summer Reading Program</b> Worked to coordinate Summer Reading Program activities. This included setting up children's shows, giving out prizes, and logging children's reading hours. Also worked shelving books and cleaning DVD's.

### Education & Courses

Currently pursuing Electrical Engineering degree at UCSD providing the following relevant courses.

ECE 107	Electromagnetism	ECE 45	Circuits and Systems
ECE 30	Introduction to Computer Engineering	ECE 35	Introduction to Analog Design
ECE 65	Components and Circuits Laboratory	ECE 25	Introduction to Digital Design
ECE 15	Engineering Computation		