I have always enjoyed learning about computers and electronics. They have held my interest for as long as I can remember. I enjoy the ability to control and manipulate power. When I was young my first experience with electronics came with my first stereo system. I started to find ways to make the music as loud as possible. This continues today. When I was 16 I bought my first truck and installed my own car audio system. Car audio is still a hobby of mine to this day. The car audio electronics hobby extended to home audio and video systems customization. In 1991 my parents bought our first computer, an IBM 386. I was so engulfed with it I messed around on the computer for 8 hours and it only felt like 1, I remember coming out of the room and looking outside seeing that it was dark. I had no idea so much time had passed. This began my fascinations with computers, I have built several of my own computers since.

I graduated high school in 2001. After high school I started working at car audio installation shops fulfilling my need to play with electronics. Finding the need for higher income I enrolled in the IBEW (International Brotherhood of Electrical Workers) apprenticeship program in 2005. As an apprentice I received hands on learning in the field as an electrician on top of the classes required for the program. I have worked in almost every casino on the strip, work has included remodels and new construction. Some work examples include the remodel of the Flamingo hotel rooms, and the new construction of Caesars Palace Octavius and Augustus Towers. I have worked on low voltage circuits such as fire alarms and security electrical circuits. I have also worked on circuits with voltage up to 12,470kV. The power distribution system for the Caesars Palace towers are fed from the 12,470kV. I became a Journeyman in 2011, just as the market had crashed. I was basically out of work for 2 years. I decided I needed to make a change and enrolled at UNLV in the Electrical Engineering program. My experience helped motivate me to study and do well in my classes. I have the ability to learn quickly, especially if I see someone else do it. I also learn from other people’s mistakes; I find this very convenient in preventing myself from experiencing the same frustrations or mistakes other people have been a victim of.

The Electrical Engineering program at UNLV has allowed me to become more familiar with various testing equipment such as, Oscilloscopes, Function Generators, Multimeters, and Power Supplies. I have also become familiar with several programming languages including C/C++, Verilog, VHDL, and Matlab. The programs I have used during my studies include Quartus, Cadence, and LTSpice. In alphabetical order I have studied under Dr. R. Jacob Baker, Dr. Biswajit Das, Dr. Emma Regentova, and Dr. Robert J. Schill. A list of some projects I have worked on will be listed below followed by the class associated with the project:

* Hand built a Wimshurst machine EE330(Electromagnetics)
* Designed and implemented a micro-controller for the DE2 board CPE300(Digital System Architecture and Design)
* Designed a MOSFET amplifier implemented on a breadboard EE320L (Engineering Electronics Lab)
* Designed an AM radio EE320(Engineering Electronics)
* Designed a buck converter (dual switching power supply) EE421(Digital Electronics)

My goal is to enroll in the Electrical Engineering Graduate College program at UNLV and continue my education, specifically in the field of MOSFET circuit design and layout. Currently I am working with Dr. Baker on a Fast Transient Digitizer using Cadence.