

My name is Abraham Castaneda and I am a graduate student at UNLV pursuing a Master of Science in Electrical Engineering and currently hold a Bachelor of Science in Electrical Engineering. Throughout my time at UNLV I have been fortunate to partake in research involving the benchmarking of RISC-V processors as well as the testing of tiled silicon photomultiplier array read-out integrated circuits. My primary focus within my major is electronics.

This past summer I was granted the amazing opportunity to intern with two teams from NASA's Goddard Space Flight Center. Within the Heliophysics Division, I helped with the testing of power electronics with a focus on identifying ways to improve the reduction of electromagnetic interference (EMI). I also was a part of the SPEID CubeSat team, a team of collegiate and high-school interns, within the Instrument Systems and Technology Division. As one of the team leads, I supported the development of the communications and ground operations subsystems and provided advice on EMI testing as the avionics subject matter expert. The aim of the CubeSat project was to develop a fleet of CubeSats capable of supporting the OSAM-1 mission through 3D reconstruction of in-orbit video footage.