Zahir Castrejon

My name is Zahir Abram Castrejon and enrolled within the integrated BS-MS program at University of Nevada Las Vegas. I consider myself an Engineer, Photographer, and competitive Brazilian Jiu Jitsu Athlete. I was born and raised in Las Vegas Nevada and I'm a first-generation immigrant with parents that migrated from Mexico. I'm also the first to out of my immediate family to pursue a college education. As a mechanical engineering major, I have a deep passion for robotics and autonomous systems. With my passion for engineering and applied mathematics, I have had the opportunity to tutor at Democracy Prep-Agassi Campus here in Las Vegas area. My goal as an engineer involves contributing to NASA like missions for human space exploration. I am currently a member of the Drones and Autonomous Systems Lab (DASL) at UNLV under Dr. Paul Oh. My current experience involves using Machine Learning techniques in my projects along with other appropriate skills

While a member at (DASL) my skills have been enhanced with fabrication (laser-cutting, vinyl-cutting, silk-screening, sewing, and woodworking); programming (Linux and C/C++/Python); and mathematical fundamentals (linear algebra, partial differential equations, and statistics). While working along PhD student lab members, I have been trusted to lead projects and assist UNLV's Avatar-Hubo team that successfully competed in the Semi-Finals during September 2021. My cable suspended camera system to detect plant health encompasses both my passion for robotics and NASA's missions. The purpose of this research is to develop a cable suspended camera system that is efficient and safe for space exploration. This cable suspended camera system will allow for monitoring plants and differentiate between unhealthy plants from healthy plants and harvest yields. I believe this project can help me inspire students within the Clark County community while expanding my knowledge of Artificial Intelligence and robotic systems that can be used for space exploration and disaster relief.