**Personal Statement**. I am a first born American citizen in my family. My father is from Veracruz, Mexico, and my mother is from Tamaulipas, Mexico. I was raised all my childhood and adolescence in both Reynosa, Tamaulipas and Cempoala, Veracruz. Both my parents came from rural areas where living was heavily dependent on agricultural work. Now, Reynosa has evolved to be a more developed city with normal access to motorized vehicles and industry development. Whereas Cempoala is still a town where transportation relies heavily on walking and motorcycles. Luckily, my parents overcame the adversities and became a couple that could provide food, and education to a family of two children.

After completing middle school in Mexico I got a unique offer. To go live with some relatives in the south-most part of Texas. I always wanted to give back to my parents the sacrifice they made for me and that inspired me to move study in the United States. I was 13 years old when I first moved, and my level of English was not enough to communicate in casual conversations. I am a person who likes to be challenged and loves to overcome any adversities. In less than two years being exposed to the language, I decided to test my skills and switched from the regular ESL (English as a second Language Program) and decided to try English classes at the university level. The challenge proved more than difficult but I ended up learning more than I could ever did on the basic levels of English provided by the school.

My thirst for knowledge can only be compared with my urge to provide justice; in times of injustice I advocate for the wellness of my beloved ones and my society as well. As a Hispanic with no previous knowledge of the American Educational System, I encountered many injustices. As any American raised citizen knows, schools used a GPA scale system to measure students’ performance and rank them. In Mexico this system does not exist and I had no previous knowledge of it until I was finishing my sophomore semester in High School. Then, I found out that ESL classes I took before had actually damaged my overall performance as a student from an academic view. So my rank was lower than my classmates even if I would get higher grades on every advanced level class. I took the case to the principal and a student organization was assembled to increase awareness on educational systems in America for minorities coming from other states. I was restricted from even applying to many competitive programs such as the Gates Millennium Foundation for not having the minimum GPA. I entered the Mechanical Engineering program at the University of Texas Rio Grande Valley (UTRGV) with no financial support from my parents nor scholarship programs. I had to start with loans to pay for all my living expenses. I joined the workforce since I was 17 years old and have worked at least 2 jobs throughout my whole bachelor’s degree. On Spring 2017 I graduated Summa Cum Laude.

Achieving this level of recognition was not easy, but my biggest victory was not obtaining a degree or having a high grade title. Throughout my undergraduate career, I worked as both Teacher Assistant, and a Science Tutor. With these two jobs I was able to help students to improve their grades, and also to help them understand how to become better students in their respective fields. I encountered too many students that did not know the importance of an internship, the importance of a resume, how to apply, or find funding opportunities. I studied in the highest level of Hispanic attendance university in the United States, and even then many of them were stranded in terms of life and educational guidance. I finished my undergraduate degree with not only engineering knowledge, but with the satisfaction that many students were able to follow their dreams with my aid.

**Professional Development/Extra-Curricular Activities.** During my undergraduate education I obtained my first research opportunity on the University Transportation Center for Railway Safety (UTCRS) at the University of Nebraska Lincoln (UNL). There, I did research on vehicle simulations at high speeds going under Highway Railway Grade Crossings with ADAMS MSC. After this, I became a Teacher Assistant under Mr. Lawrence Cano and Dr. Vasquez for Mechanical Engineering Analysis. At the same time, I earned a College Reading & Learning Association (CRLA) Certification for my tutoring services for the university. Averaging out more than 750 students during my tutoring/teaching service as an undergraduate student. Many of them still maintain contact with me for either mentorship or share their success stories.

Aside from academic work, I spent time volunteering in many community service events such as the Hispanic Engineering Science and Technology week (HESTEC), Guerra Honors Society Programs, and UTCRS Symposiums for student recruitment. The major objective was to introduce people from Hispanic communities to the STEM areas and promote research in transportation for upcoming undergraduate students. Also I had poster presentations showcasing research done previously for the UTCRS program.

By my graduation on May 2017, I obtained opportunities to attend different prestigious graduate school programs, including The University of Texas at Austin, Central Michigan University and more. For each one, I got awarded an Engineering Recruitment Fellowship incentive for attendance, and decided to go back to UNL under the tutelage of Dr. Stolle. During this time I was a group leader of a Senior Design Project consisting of 4 students in modeling, designing, building, and testing a Multi-Station Creep Testing Machine. The objective was to provide a new laboratory equipment and test procedures under ASTM standards for new generations of engineering students. This project was tested with upcoming undergraduates and earned the prestige as the most successful Senior Design project in the entire history of UTRGV as of Spring 2017.

After my acceptance to the graduate program at UNL I started working at Midwest Roadside Safety Facility (MwRSF) focusing on instrumentation and data analysis for full-scale vehicular testing using SAE techniques with compliance with AASHTO’s Manual for Assessing Safety Hardware. During Spring 2018, I was invited to a symposium for Mid-America Transportation Center, where I motivated undergraduate students from minority communities to pursue a graduate education. Recently, one student from that program joined MwRSF as an intern for the Summer of 2018. Currently, I am doing research on autonomous transportation, and how to implement roadside infrastructures into communication schemes of different vehicular systems.

**Future Goals.** Recently I got offered an option to pursue a Doctorate Degree, and since then, my short-term goals include meeting all requirements to enter the Doctorate Program. This way, I can start the best path to give back to my community, via research projects and as an educator. My mid-term goals include finishing my thesis/dissertation. My thesis project involves testing capacities of automatic driving systems and developing a new backup option for detecting and predict deviation from the road through roadside infrastructure. This way, transportation systems can improve overall safety. To achieve this goal, my steps are: To learn about vehicle dynamics and control system modeling techniques. To developed a network of connections in the transportation area to implement my research work into as many scenarios as possible. To increment my skills as an instructor and being able to lead a team of students researching on this area. My long-term goals would be to become an educator on the Mechanical Engineering area where I could help students and engage teams to work together for new transportation technologies. With the aid of the Dwight David Eisenhower Transportation Fellowship Program, I know my objectives can reach a step closer to become a reality.