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**Essay Question: In an essay style of 700 â€“ 850 words, please answer the following three-part question. NOTE: Please be sure to address all three elements as a single essay, and not three separate parts. It must be an essay; otherwise your application will not be considered. Provide specific examples as needed.**

1. **As a future STEM professional, how have your life experiences (cultural, family, school, volunteerism, etc.) helped you to develop the skills, competencies and qualities that shape who you are today; and**
2. **how have you applied those skills, competencies and qualities to serving the Hispanic or other underserved communities; and**
3. **how have your life experiences defined your STEM career aspirations?**

Great Minds in STEM Scholarship Program

To the Committee Members:

My story started in a city called Reynosa, Mexico, in which I lived all my childhood. My parents did all their efforts to always bring food to the table, provide shelter, and constitute an education for both my brother and me. Throughout my life, they have always been a strong motivation for being successful in life. When I got to the age of 13, my parents offered me with a life chance that would help to be the person I am today. That was to move to the United States to study during my High School years. They really pushed me to choose this path and I can say that I could not be more thankful to them for that opportunity.

While moving to the U.S., I went through the difficult transition of learning a new language and struggled to simply get decent grades on my classes. However, everything changed when I joined a Robotics Club sponsored by my Chemistry teacher. Motivated by my teacher and friends, I decided to enter higher-level classes known as Advanced Placement or Dual Enrollment depending on the school. At first it was difficult, so much that I would stay after school tutoring every day to keep up with my grades. After struggling for many months, I started to master the English language and being able to get on top of my classes. I became a tutor for my chemistry class, and I started to teach students about Chemistry. I held this position for about 2.5 years following to my graduation and my transition to college.

When I entered the University of Texas Rio Grande Valley (UTRGV), my family did not provide me with much financial support, which motivated me to obtain many jobs to sustain myself. Thankfully, after a year of working in retail and food services, I was able to obtain a job during my sophomore year as a Science Tutor, where I could relive the joy of helping others understanding sciences. In this job I realized that I was not the only one that had to go through the struggle of learning a new language or adapting to a new place. Many students went through this, but I knew there was a difference now I could make. I could help them not only in classes, but in the language as well. The more experience I gained, the more jobs and internships I obtained. With this, more people started to look for me in search of advice or instruction. Many students got their grades up thanks to my teachings, and many others obtained scholarships or internships from my advice. Later, I moved to work as both tutor and teacher assistant, where my level of responsibilities and desire to help others increased. It was difficult at first, but I never quit on teaching somebody who is eager to learn. During my undergraduate career I had many volunteering experiences such as HESTEC (Hispanic Engineering Science and Technology week), where I would participate with different organizations such as the Physics Association or the Society of Hispanics Professional Engineers, in order to motivate many young students to obtain a degree in STEM fields.

Currently, I am a graduate student working on a master’s degree at the University of Nebraska Lincoln. Since my enrollment here, I have been in touch with many students from UTRGV, where I have encouraged them to pursue a graduate degree. Similarly, I have been working with professors to do information sessions or presentations where I keep reaching out to more students to pursue graduate studies as well. My commitment to volunteering, student enrichment, and sharing my experiences with others led me to apply for the UNL Doctoral program so that can become a professor with excellence in transportation and vehicle dynamics, providing back to my community and helping others to realize their aspirations. I want to inspire a new generation of Hispanic and underprivileged students in STEM fields, specifically in transportation, safety, and vehicle dynamics. It is my objective to obtain an academic professor position at a university focusing on transportation research and teaching, encouraging, and providing opportunities for disadvantaged students. I want to help students and engage teams to work together for new transportation technologies.

Innovative ideas are always present, but it takes determination to make them into a reality, and I have that determination first shown to me by my parents and fulfilled in my life which has carried me through challenges and given me hope and inspiration.

Thanks for your time,

Ricardo Jacome