**Describe the unique qualities that attract you to the specific undergraduate College or School (including preferred admission and dual degree programs) to which you are applying at the University of Michigan. How would that curriculum support your interests?**

I can still recall the day my six-year-old self was given a rather disturbing image of my favorite food: strawberry yogurt. As a child who learned that bacteria were living and harmful, the image of tiny insects swimming within the yogurt’s pools was alarming.

Years later, I finally learned of good bacteria and its benefits. This astounding knowledge fueled a newfound curiosity for bacteria and its properties. However, the information in my AP Biology textbook wasn't enough to satisfy my curiosity. To expand my knowledge, I attended the “Introduction to Laboratory Research” course at Johns Hopkins University, where I was introduced to bacterial transformation and the immune system. Upon realizing that helpful bacteria can be utilized to counter harmful ones, I sought to implement this knowledge within actual products. Therefore, I desired to learn more about laboratory research and product manufacturing to develop my own pharmaceutical company and formulate health products with high efficacy.

Through the University of Michigan’s College of Engineering’s unparalleled research opportunities and facilities, I’ll gain exceptional research experience by collaborating with faculty members in the UROP. I hope to work under the mentorship of Associate Professor Sunitha Nagrath, whose research on utilizing engineering to generate impacts in medicine and life sciences aligns with my interests. With goals of improving the health industry, I seek to conduct research projects with Professor Nagrath to implement engineering practices in creating revolutionary pharmaceutical products that’ll save many lives. This would be similar to a project I’d done, where I experimented with ingredients such as aloe vera and witch hazel to formulate my own natural soaps and hand-sanitizers in an attempt to help local children in my society.

Furthermore, I’d like to further explore my interests within research through the SURE program after my sophomore year, where I’ll gain crucial insights from the leading faculty members of the nation. Not only do I get to contribute in creating an abstract booklet, but I'm also promised the opportunity to assess whether I seek to pursue a Masters degree.

As work experience is essential in developing a company, the University of Michigan’s Engineering Co-op program provides me with the quintessential opportunity to implement my engineering skills for practical application. With aid from the ECRC, I seek to pursue my studies while working for either the Esperion Therapeutics, Inc. or Clark Professional Company, where I’ll learn to tailor the production of medications to specific needs and utilize acids to formulate pharmaceutical products.

Developing a company requires more than just skills and work experience, however (?), it calls for leadership and entrepreneurial skills. Therefore, the ELP, unique to the University of Michigan, is the perfect program to enhance those skills. Through the 3-credit courses, internships at start-ups, opportunities to begin a venture, and exclusive access to engaging with notable investors, this program will distinguish myself from other good developers and businessmen.

The University of Michigan’s College of Engineering provides its students with a great school-life balance environment. As engineering is a demanding degree, the extracurriculars provided will help me grow as a student, leader, and individual. Furthermore, Michigan’s curriculum focusing on learning through “doing and collaboration” is essential for aspiring engineers and entrepreneurs. I believe that as a Wolverine, I’ll be equipped well to turn my dream into a reality with the support of the school-spirited community.