**UMich - 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?** *(502/550 words)*

I first understood the capacity of Statistics for technological change upon stumbling on a YouTube video on data-driven decisions in robots.In any scenario, statistical models are used to form decisions on how the robots should interact. Upon studying this further, I realized how much of my daily life was improved by Statistics, from my automated roomba to my email’s spam filter. While I have always been intrigued by the analytical and investigative nature of math, this newfound idea of statistics as a tool for social change and real-world problem solving is ultimately my driving force in choosing this field of study. I hope to pursue this and grow, both as an academic and a community-oriented person, at UM.

At UM, I hope to develop my skills and perspectives through involving myself in the Statistics department’s vast range of research offerings, applying these insights to benefit my own community back home. I really enjoyed investigating solutions to employee quits through Statistics, specifically survival analysis, in my IB Internal Assessment and hope to continue this line of work under the mentorship of Dr. Gongjun Xu. His creative approach, which is to use Ordinary Differential Equations (ODEs) for survival analysis, unifies multiple types of survival models which are otherwise mutually exclusive. This provides a rigid evaluative framework that allows me to build more insightful survival models which tackle problems back in Indonesia, such as earthquakes, more impactfully.

UM’s academic offerings, such as the weekly discussions of LSA’s Statistics 415 on real-world data analysis, enhance my real-world problem solving within Statistics. This experience is invaluable to my goal of using Statistics to benefit my community, particularly in the field of education. I noticed that many Indonesian public schools haven’t digitalized their learning environments yet, despite plans to do so. As a result, students lack the exposure to utilize available computers as a resource to efficiently gain knowledge. With this, I gave a helping hand in boosting the youth’s digital literacy by providing them with the e-library I programmed. However, I still want to implement more statistical models and big data methods into this, like an automatic book recommendation system.Your LETSI organization will also facilitate this through the weekly design jams that give me first-hand experience in actively brainstorming solutions to problems in EdTech, collaboratively. With inspiration and enhanced problem-solving within EdTech, I see myself walking out of a design jam with a plethora of knowledge to implement new features to my e-library, and new ideas of products that amplifies educational technology in my communities.

My pursuit of ambitions requires a balanced lifestyle to ensure I recharge and stay motivated to continue working towards my goals. In high school, I took up “speedcubing”, since the satisfaction of solving a Rubik’s cube at high speeds provided a fun escape and mental rest. I want to join your Cubing Club, learning advanced blindfolded-solving techniques from Stanley Chapel - the holder of four current world records. I always feel enlivened by amplified satisfaction when I successfully solve Rubik’s cubes without looking.