✅**NW - While other parts of your application give us a sense of who you are, we are also excited to hear more about how you see yourself engaging with the larger Northwestern community. In 300 words or less, help us understand how you might engage specific resources, opportunities, and/or communities here. We are curious about what these specifics are, as well as how they may enrich your time at Northwestern and beyond. (402/300 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 NU.

At NU, I hope to develop my skills and perspectives by involving myself in the Statistics department’s vast range of research offerings, applying these insights to benefit my community back home. I really enjoyed investigating solutions to employee quits through Statistics, specifically survival models, in my IB Internal Assessment and hope to continue this line of work under the mentorship of Dr Martin Tanner. His creative approach, shown in his paper "Mixtures of proportional hazards regression models", combines two crucial yet mutually exclusive survival models that have different purposes. The multipurpose model he researched on provides me with a rigid evaluative framework to tackle issues back in Indonesia more impactfully, such as earthquakes.

NU’s academic offerings, such as Statistics 390-0’s collaborative “data science project” for a real-world stakeholder, 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. I felt delighted after giving a helping hand in boosting the Indonesian youth’s digital literacy by providing them with the e-library I programmed. Because of this, I’d like to continue providing social good through EWB-NU, as they accommodate interdisciplinary problem-solving in projects tailored towards communal problems, including education, at which I am given an opportunity to apply knowledge in Statistics. I can see myself walking out of ameeting with a plethora of knowledge to implement new features to my e-library, as well as new ideas for products that amplify Indonesia’s educational technology.

*Hey Farrel!*

*I think it’s great that you talk about Indonesia so much here. I’d also add some more connection to the NW communities. Yes, it’s good that you’re looking at “the beyond,” but the prompt also asks specifically about how you’ll contribute to the community. I think that’s the part that would make your socially-conscious, sacrificial heart shine brighter through this essay.*

✅ **GT - Why do you want to study your chosen major specifically at Georgia Tech? (318/300 words)**

I first understood the capacity of Statistics for technological change upon stumbling on a YouTube video on data-driven decisions in robots. 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. 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. Thus, pursuing Mathematics with a Probability and Statistics concentration at GATech will facilitate my academics and goal to help communities I belong to, in Indonesia and beyond.

I hope to develop my skills and perspectives by involving myself in GATech’s vast range of research offerings, applying these insights to benefit my community back home. I really enjoyed investigating solutions to employee quits through Statistics, specifically survival models, in my IB Internal Assessment and hope to continue this line of work under the mentorship of Dr Jye-Chyi Lu whose work constructed a creative approach to survival analysis that takes into consideration random hazards. This gives me a suitable framework to tackle earthquakes back in Indonesia more impactfully.

GATech’s academic offerings, such as the application of theoretical Machine-Learning concepts in CS 4641’s projects, will enhance my real-world problem-solving within applied 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. As a result, students lack the exposure to utilize available computers as a resource to efficiently gain knowledge. I felt delighted after giving a helping hand in boosting the Indonesian youth’s digital literacy by providing them with the e-library I programmed. Because of this, I’d like to join your Bits for Good organization which encourages “students to drive social impact” – I can apply Statistics to projects of nonprofits, including ones that involve educational technology.

*Hey Farrel!*

*This is veeeery close to being done. Good job!*

*Would love to see a bit more uniqueness about how you’d fit into GTech, and that’s it!*

✅**UVA -  College of Arts & Sciences: If you could create a college course that all UVA students would take, what would it be about and why? (100/100 words)**

“Identifying Misleading Statistics”.

 For a long time, I knew statistics can conceal truths, but only after understanding the specific ways they do so did I realize I had been deceived by percentages and graphs in infographics and advertisements. With statistics’ increasing prevalence within all sorts of information, UVA students are likely to encounter statistics within their pursuits of personal ambitions. With this course, all UVA students can successfully avoid misleading statistics, and instead seek for genuine ones which support their ambitions. This also heightens our critical thinking; I learned not to accept statements immediately, despite how convincing it may seem.

*Hey Farrel!*

*I’m a little concerned about this prompt. Doesn’t this class already exist in one form or another through critical thinking / epistemology / statistics classes? What’s so unique about this class of yours?*