***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.***

We can’t see or taste contaminants, but if they’re that harmful to our body, what can we do about them? That’s the reason why I started my research on Northwestern University’s Center for Water Research, especially with their invention of ROSALIND .

Having previously created and implemented a water filtration system in Kei Island, an underprivileged area in Indonesia, I felt that the lack of testing centers there was tedious. Being at Northwestern would offer me the opportunity to learn more about ROSALIND’s testing efficiency, apply it in other isolated areas of Indonesia, and eventually create a freely-accessible water safety map that can act as a guide for people to learn more about the water conditions around them. As a member of the water research center, I would devote both my ideas and dedication to participate in activities such as research and water facilities visits to gain a better understanding of water infrastructures and treatment procedures.

Associate Professor Sera Young’s article “Inequality of household water security follows a Development Kuznets Curve” also piqued my interest. In addition to evaluating aspects of water security nationally, it also highlighted the importance of conducting assessments from low- and middle-income nations because income levels may correlate with water security. This study served as a reminder for me to ensure that all features must be freely accessible for everyone while I prototyped the water usage tracker for my app. I would love the opportunity to collaborate with Professor Sera using Northwestern's undergraduate research opportunity to do a more in-depth study into the forms of data analysis and how to apply this information to the water safety map.

Furthermore, Northwestern's Institute on Complex Systems can guide me with my data science research study, especially when using data science and other complexity science to identify trends in water contamination through academic publications and research.

Northwestern will enable me to pursue my passion in learning data science alongside my interest in water research. 