**Why are you interested in attending Columbia University? We encourage you to consider the aspect(s) that you find unique and compelling about Columbia. (200 words or fewer)\***

Water is a basic necessity, but why is it not accessible to some people? I witnessed this firsthand in Kei Island, a remote area in Maluku, Indonesia. While I’ve implemented a water filtration system in Kei and improved their collected-water quality, it didn’t really improve the residents’ water access; they still have to travel for miles to collect fresh water.

My goal is to improve water accessibility. In researching ways to do so, I stumbled upon Columbia 2013’s water distribution system in Ghana. I read about how water can be conveniently supplied throughout the island by installing an electric-powered submersible pump and constructing a pipe pathway to avoid any contaminants. In delving deeper into this subject, I became interested in Research Scientist Lauren Josset’s study, “The U.S. Water Data Gap”. In her conclusion, data analysis, both statistically and phenomenologically, should be applied to water monitoring. Further, machine learning tools could be used to quantify water use and make informed decisions about their water footprint.

I would love the opportunity to collaborate with Lauren Josset to do more in-depth studies into the forms of data analysis and incorporate data monitoring into the water distribution system.