**How will opportunities at Purdue support your interests, both in and out of the classroom? (100 words)**

As the world’s largest archipelagic country, Indonesia is reliant on the desalination process as its clean-water source. However, during my internship, I learned that the process was powered by the grid, which produces lots of CO2 emission, instead of a sustainable source. Purdue has renewable energy initiatives that develop a wave-energy convertor for reverse osmosis and I intend to understand this technology to enable Indonesia’s first large-scale wave-powered desalination process. Moreover, I consider myself a budding animal activist and the Cause For Paws club would enable my next-generation solar-powered automatic animal feeder that better suits rescued animals in shelters.

**Briefly discuss your reasons for pursuing the major you have selected. (100 words)**

A charity event in school dedicated to the Pakistan floods has made me realize that global warming is an imminent threat. This ignited my interest in sustainable energy because more implementations of it would mitigate rising sea levels. Whilst researching sustainable energy sources for a Design & Technology project, I learned about the mechanisms inside of a hydroelectric dam and was immediately hooked. Ever since, I’ve pursued the concept of mechanical design where I used Computer Aided Design for my solar powered device. This eventually inspired me to major in Mechanical Engineering.