**Explain, in detail, an experience you've had in the past 3 to 4 years related to your first-choice major. This can be an experience from an extracurricular activity, in a class you’ve taken, or through something else. (150 words)**

My most memorable experiencewas a project that I worked on with BAWABALI – a Bali-based animal welfare NGO. The objective was to develop an automatic animal feeder for one of BAWABALI’s dog shelters.

I began with designing the feeder by referring to existing household dog-feeders and putting my thoughts through simple sketches on isometric paper and then moved on to CAD-3D mockup design showing the main feature consisting of a wide feeding area for 4 dogs, detachable containers for easy refill, and solar panels. A couple of discussions and redesigning later with the BAWABALI team, we finally reached an agreement on the dimensions, materials, and configurations that fit their shelter. Several trials-and-errors later until the prototype is working properly, we proceed to the testing phase at the shelter. We were delighted to see that the feeder works and BAWABALI can deploy more teams to the field to rescue more animals in Bali.

By pushing the boundaries of my imagination, I created something unique. Not only was I able to practice my engineering skills, but I was also able to channel into building a device that can make a difference in the animals’ life.

**Describe your personal and/or career goals after graduating from UIUC and how your selected first-choice major will help you achieve them. (150 words)**

***Draft 1***

Indonesia - home to 13,000 islands - has a huge potential for using tidal turbines as an alternative energy source in its vast archipelago of remote islands. This would contribute to reducing Indonesia’s high pollution level.

Although there are some turbines currently functioning, they only generate small amounts of energy because the utilization of fluid mechanics is still in the early stages. Understanding fluid dynamics could lead to new designs for harnessing more kinetic energy, therefore, generating more electricity. This requires a good understanding of what occurs underwater to create a device that could operate smoothly. In addition, developing my engineering design skills is crucial for making accurate models to simulate real life scenarios.

To be able to do this, majoring in Mechanical Engineering is the optimal choice. Pursuing Mechanical Engineering at UIUC would enable me to be at the forefront of building efficient, high energy density and sustainable energy technologies.