**4. Describe how you have taken advantage of a significant educational opportunity or worked to overcome an educational barrier you have faced.**

I was fortunateenough to attend a two month internship at the Naval Postgraduate School in Monterey, CA in the summer of 2016. Two fellow interns and I completed all types of tasks in the machine shop such as carving targets and eight foot conducting squares of Copper with a milling machine. But the highlight of our time at the Naval Postgraduate Schoolwas not milling metal, it was bringing old robots back to life.

Working in a robotics lab with physics professors was an opportunity that would not only showcase my robotics ability, but also develop my skills by learning more complex ways to program, build, and control robots. We were given a laptop, an Arduino, and an old carbon fiber military robot, which we later named Mongo. Our challenge was to strip the old components, implement new technologies, and code the robot to be autonomous and remote controlled. We also designed and 3D printed battery mounts to hold both of the twenty-four volt batteries that would power the bot. The wiring of Mongo was not too difficult, but the programming posed quite the challenge. We had knowledge of the Java language, but knew nothing about Arduino. With little outside help, we utilized the Arduino websiteand teamwork to master the Arduino language. After many bugs and unforeseen difficulties, we had created a robot that we could control and that could move all on its own.

Having created a functional and attractive robot, we were asked to present Mongo and his capabilities to doctorate naval students and professors at the school. This has inspired me to serve my community in a more substantial way, all to try to be like the heroes who put their lives on the line for us everyday. The honor to be presenting to the courageous who preserve our freedoms is an experience that I will truly never forget.

Although this internship had its challenges, it was incredibly rewarding as I gained teamwork, technical, and presenting skills that will benefit me later on my engineering pathway.