**4. Describe how you have taken advantage of a significant educational opportunity or worked to overcome an educational barrier you have faced. (350 word max.)**

Last summer I had the opportunity to intern with a professor in the Meteorology Department at the Naval Postgraduate School. For two months I worked researching factors that impact electromagnetic wave propagation in the lower atmospheric boundary layer. The goal of the project was to identify stable and unstable atmospheric conditions and to estimate heights at which evaporation affects the propagation of electromagnetic waves, such as those used by the military to detect objects and send missiles. As I discovered, certain conditions contribute to greater degrees of electromagnetic wave refraction and ducting.

After transferring pages of data into Microsoft Excel by hand, I was tasked with learning to code using MATLAB. I had never coded in any language before, but I was determined to succeed. I quickly learned the power of email. Fortunately, my professor’s postdoctoral fellow was so efficient at returning emails that I found it was faster to email him than run down the hall to ask him a question in person. With his help, I managed to accumulate enough understanding to begin the lengthy yet rewarding journey of self-taught coding. I also had the opportunity to interact and form friendships with high school and college students from across the state and country. Surrounded by highly motivated individuals working on cutting-edge research, I felt liberated by the independence and responsibility of working at a research institution. At the end of the two months, I was able to consolidate my findings in an abstract and successfully submit it to the American Meteorological Society’s 18th Symposium on the Coastal Environment. The abstract, titled "Evaporation Duct Height over the Arabian Sea Estimated from Surface Layer Profile Measurements,” will be presented at the 100th Annual American Meteorological Society Conference in Boston this January.