Freestyle project: a ballistics calculator for small arms.

There are many factors that may affect a bullets flight through air such as the caliber, bullet grain, muzzle velocity, air density, the bullets drag coefficient, and, of course, wind. Before starting this project I knew all of these things effected the bullets path, but I didn’t know how exactly they impacted them. I enjoyed this project because I was able to see the force equations behind the bullets path and learn how the variable interacted with each other. As far as the coding goes, this was the first complex problem that I solved using matlab. Along with expanding my matlab project, I realized how much time and effort can go into coding a seemingly simple task.

Data management: estimation of Florida deer population

I surprised myself with this project, because I didn’t think I was going to be able to create a project out of just a few columns of data. Although there was some data related to deer population, there wasn’t as much as what was used in some of the other projects. Nonetheless, I used me smarts to redefine the project to better fit my data. Instead of just analyzing the data, I created new columns by estimating deer population based on the increase in percent yield. Besides learning how to be creative with projects, I have a new found appreciation for the FWC. When I graphed the estimated percent of the heard cultivated per year, it was a flat 18% for almost every year. It surprised me that they were able to manage the heard so well.

Homework problems

With these I think the most important lesson I learned here was the power of the internet (I don’t mean this sarcastically). You can pretty much learn anything from the internet and coding matlab is one of them. More often than not, I had to search the web for specific functions and taught myself tricks of the matlab trade. Besides getting a basic understanding of learning how to code, I exercised my patience while learning a new skill. I think both of these skills will help me to learn on my own in college when I find myself confused in a large lecture setting.