**What is Data Science?**

Exercise 1.2 – DSC 500 T301 2215-1 Spring 2021

In the presentation I’ll be explaining what Data Science is in relation to Healthcare.

Slide 2: What is Data Science?

Explain what Data Science is in a nutshell. For example, how people use data from past experiences to make decisions about a particular scenario. Use an example of a patient who presents to the doctor with <x> symptoms. Based on experience and knowledge the doctor has, a diagnosis is made. Data Science is trying to get a computer to make a decision based on previous data.

Slide 3: Prediction Life Cycle

A predictive model may get data from 1 or more sources. The data is fed into a model (aka mathematical formula) that answers some sort of question that you want to get an answer for. The answer is then checked to see if it was correct or not and adjusts the formula for future predictions.

Slide 4: Potential Benefits of Data Science

Go over how Data Science can improve patient care which benefits bot the patient and the organization. For example, catching cancer at early stages, preventing life threating human errors, higher incentives from funding sources, better review from US News & World Reporting, etc.

Slide 5: Computers vs. People

Will explain some of the pros of allowing computers to make decisions on big data rather than people.

Slide 6: How are These Models Created?

Explain who, how, and with what tools a predictive model is created. Explain what a Data Scientist is along with skills and qualifications. Also explain some of the tools used to create a predictive model. What is SQL? What is Python & R? What makes them different?

Slide 7: Garbage In = Garbage Out

Explain the importance of making sure that in order for a predictive model to be efficient and accurate that the data being fed to the model must also be accurate. Explain how quality data is more beneficial than the quantity of data.