## Intro:

Diabetes is a disease millions around the world suffer with. UCI Machine Learning posted a data set titled Pima Indian Diabetes data set to see if it was possible to create a machine learning model that could "accurately predict whether or not patients in the dataset have diabetes or not." I decided to use their data for a different study. I was wondering if there is a correlation between BMI and Blood Pressure? The data set posted had a sample of 729 Pima Indian women over the age of 21. The women in this study were selected from a larger database. The information was originally collected from the National Institute of Diabetes and Digestive and Kidney diseases.

#### **Biases and Weaknesses:**

There were a few biases and weaknesses I noted. BMI can be affected by many factors such as height, age, gender, and muscle mass. Also Blood Pressure can be affected by many things such as hours of sleep, resistance, diet etc. To be fair this was not the main focus of the study by the National Institute of Diabetes and Digestive and Kidney diseases.

# Results:

## **Conclusion:**

\_\_\_\_\_In conclusion there is very little correlation between BMI and Blood Pressure in Pima Indian women. My correlation of determination was a weak 8.4% and my correlation coefficient resulted in 0.2898 which ultimately means the correlation between my two variables there was a very weak positive linear correlation.

#### Infographic:

PiktoChart Infographic Link

#### Sources:

Pima Indians Diabetes Database