**Capstone Project 2**

**Model Metrics**

Machine Learning Algorithm: XGBoost

Sampling Method: Random Undersampling

Model Parameters:

* Number of trees: 100
* Learning rate: 0.3
* Max tree depth: 3
* L2 regularization constant: 10
* Subsampling: None

Model target: Heart Disease

Model features:

* Good Health
* Health Insurance
* Hypertension
* High Cholesterol
* Asthma Status
* Arthritis
* Race
* Age Category
* BMI
* Education Level
* Income Level
* Smoker Status
* Heavy Drinker
* Physical Activity
* Seatbelt
* Flu Shot
* Pneumonia Vaccine
* HIV
* Bronchitis
* Depression
* Kidney Disease
* Diabetes
* Sex
* Marital Status
* Sodium Intake
* Sample Weights

Cross-validation performance metrics:

