

Abstract: Machine Learning in the Iris Dataset

The topics of linear/logistic regression and neural networks are analyzed and applied to the Iris dataset to classify three flower species based on sepal and petal measurements. The methods and results for each model are compared and evaluated when instantiated using Matlab, an online programming platform. Two logistic regression models are created: one binary and one multi-class. These results are compared to a neural network using all three classes. The effectiveness of each model is evaluated based upon the accuracy achieved. The logistic regression model trained on all data and classes yielded ~95% accuracy; the neural network achieved 100% on testing and training data.