Visualization of Iris dataset
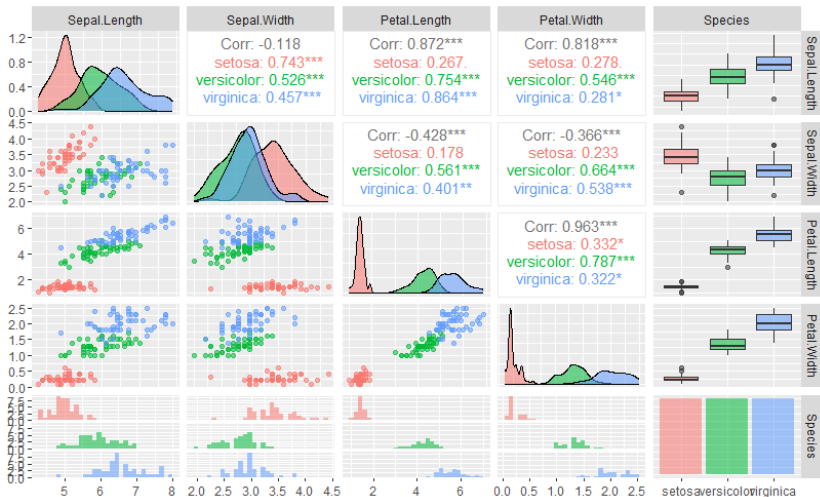
Scatterplots with marginal densities

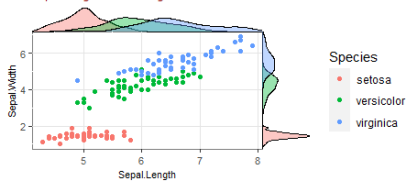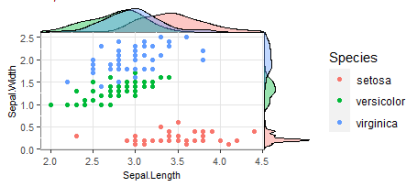# Naïve Bayes: Confusion matrix

Confusion Matrix - Naive Bayes Classifier
Predicted vs. Observed from Iris dataset. Accuracy: 0.9808

Specificity (Setosa) = 1 , Sensitivity (Setosa) = 1
Specificity (Versicolor) = 0.973 , Sensitivity (Versicolor) = 0.9333
Specificity (Virginica) = 0.9697 , Sensitivity (Virginica) = 0.9474
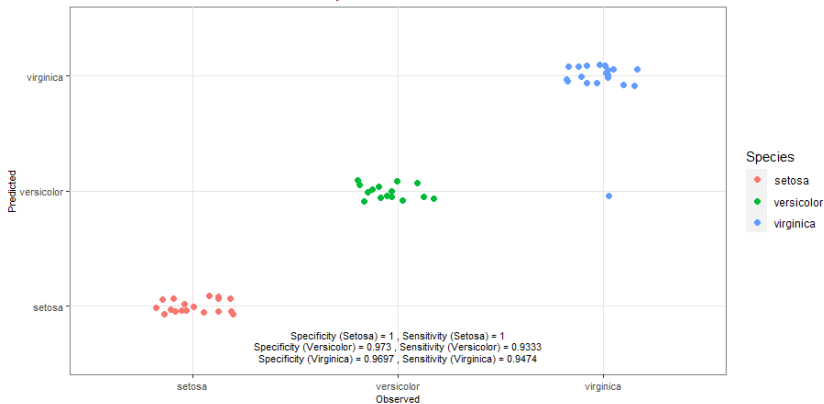
Random Forest: Confusion matrix
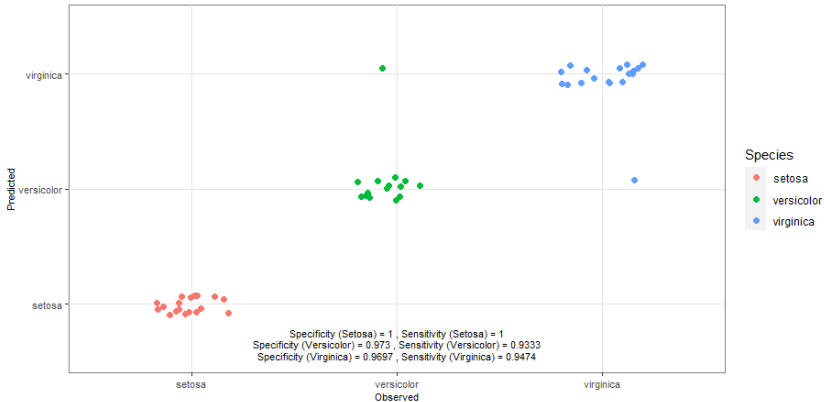
Logistic Regression: Confusion matrix

Confusion Matrix - Multinomial Logistic Regression
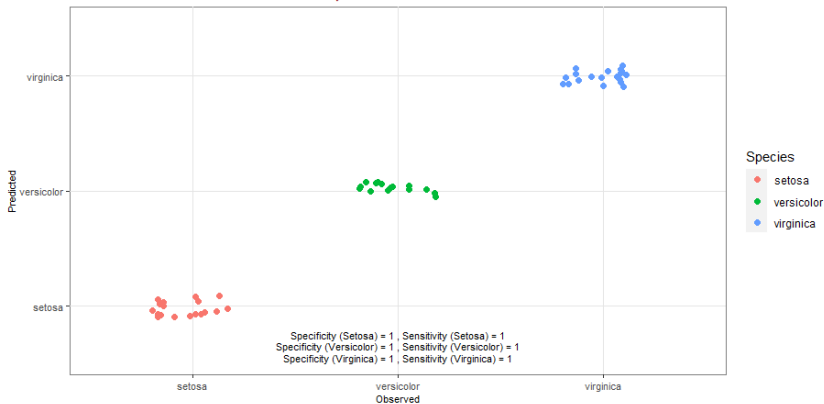Predicted vs. Observed from Iris dataset. Accuracy:
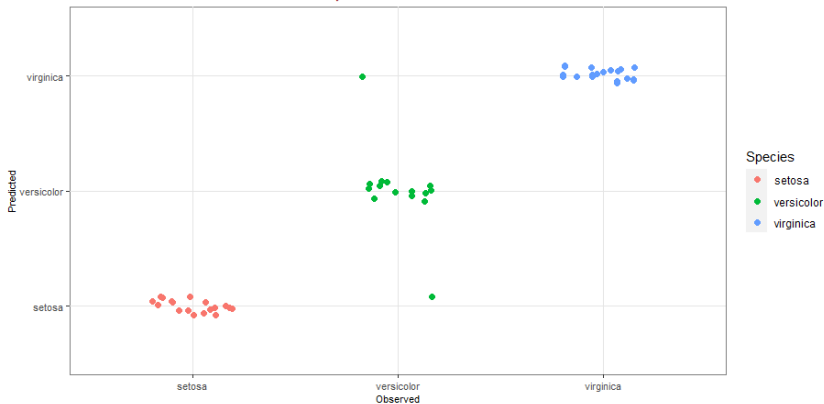
Support Vector Machines: Confusion matrix

Confusion Matrix - Support Vector Machines

Predicted vs. Observed from Iris dataset. Accuracy: 1

Specificity (Setosa) = 1 , Sensitivity (Setosa) = 1
Specificity (Versicolor) = 1 , Sensitivity (Versicolor) = 1
Specificity (Virginica) = 1 , Sensitivity (Virginica) = 1

Species
- setosa
- versicolor
- virginica

Neural Network: Confusion matrix

Confusion Matrix - Neural Network
Predicted vs. Observed from Iris dataset. Accuracy:
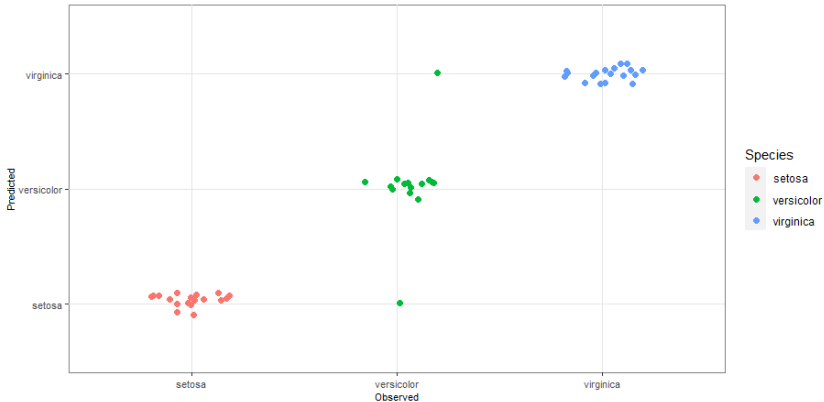
Decision Tree: Confusion matrix
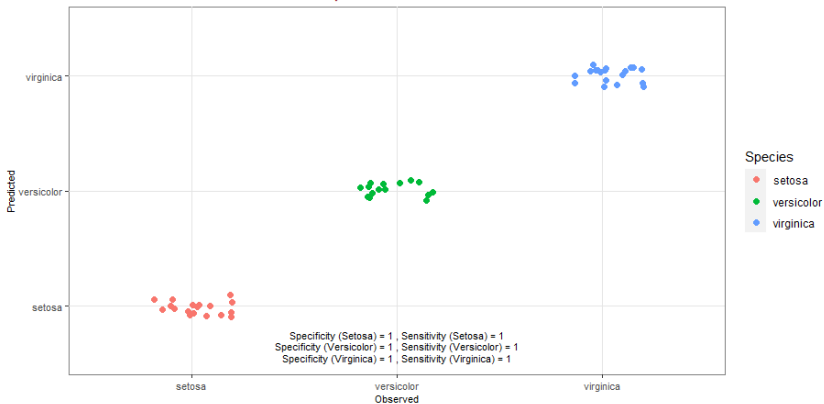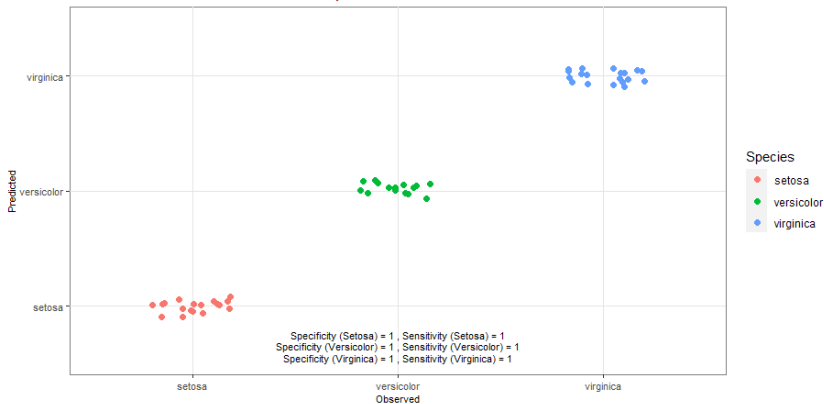
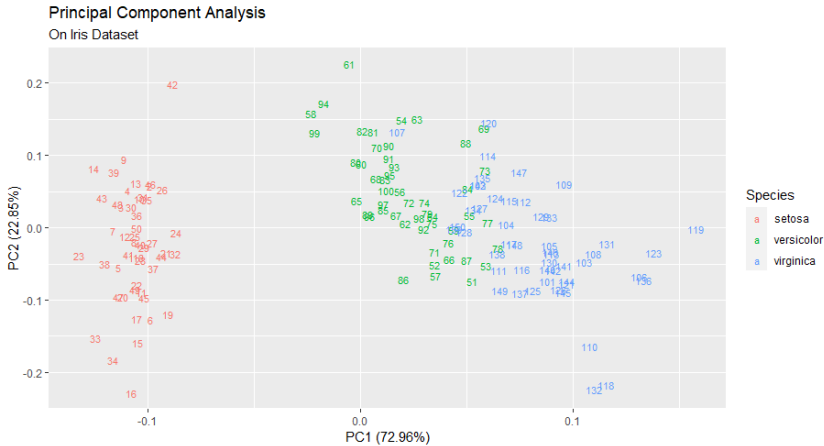# XGBoost: Confusion matrix

Confusion Matrix - XGBoost
Predicted vs. Observed from Iris dataset. Accuracy: 1

Specificity (Setosa) = 1 , Sensitivity (Setosa) = 1
Specificity (Versicolor) = 1 , Sensitivity (Versicolor) = 1
Specificity (Virginica) = 1 , Sensitivity (Virginica) = 1

Principal Component Analysis

Principal Component Analysis
On Iris Dataset

K-means

Principal Component Analysis with K-means clustering
On Iris Dataset
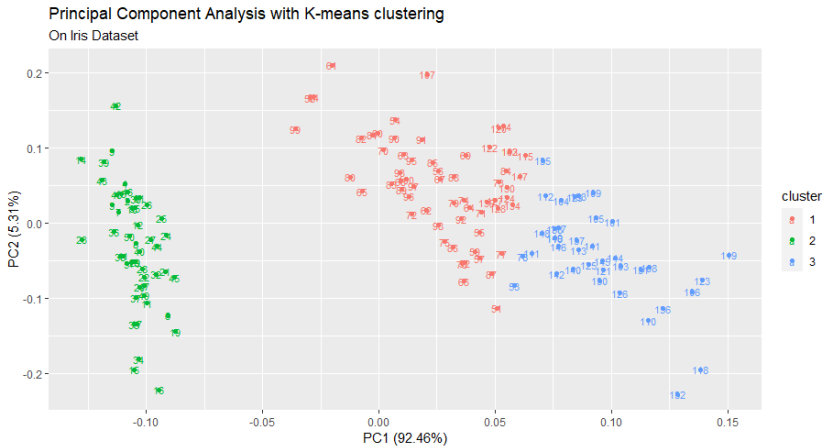
Partitioning Around Medoids

Principal Component Analysis - with PAM clustering
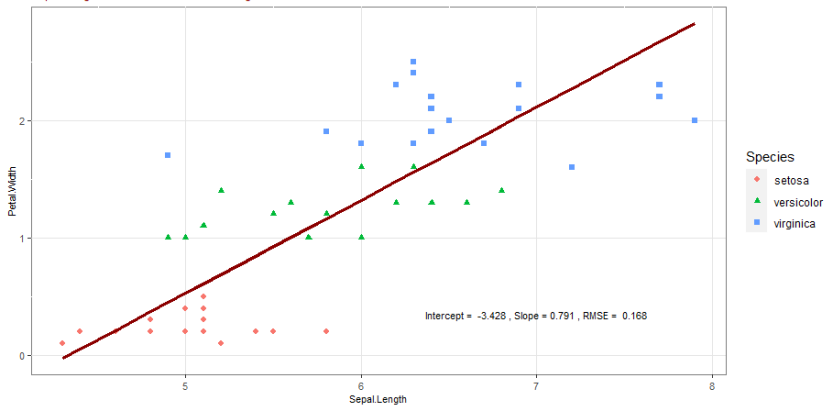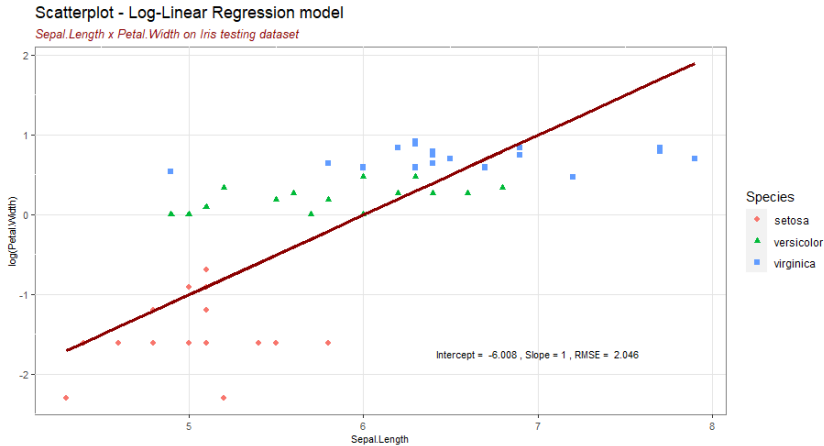On Iris Dataset
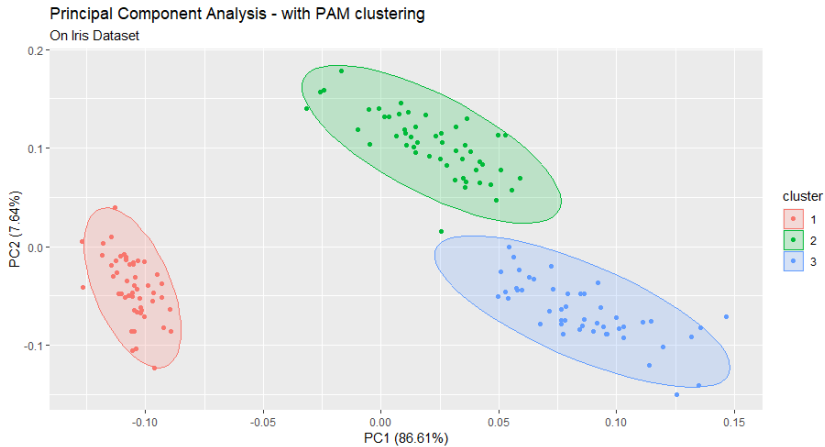
Simple Linear Regression

Scatterplot - Linear Regression model
Sepal.Length x Petal.Width on Iris testing dataset

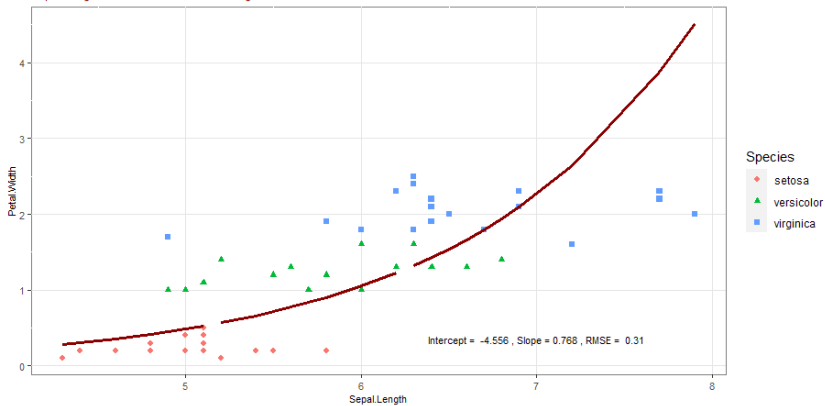Intercept = -3.428 , Slope = 0.791 , RMSE = 0.168

Simple Log-Linear Regression

Scatterplot - Log-Linear Regression model
Sepal.Length x Petal.Width on Iris testing dataset

Intercept = -6.008 , Slope = 1 , RMSE = 2.046

Poisson Regression

Gamma Regression

Scatterplot - Gamma Regression model
Sepal.Length x Petal.Width on Iris testing dataset

Intercept = -5.511 , Slope = 0.941 , RMSE = 0.609

Nonparametric Kernel Regression

Scatterplot - Nonparametric Kernel regression model
Sepal.Length x Sepal.Width on Iris testing dataset
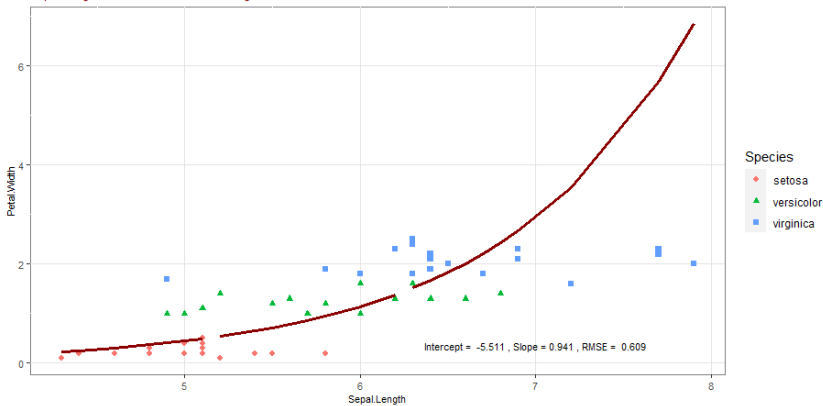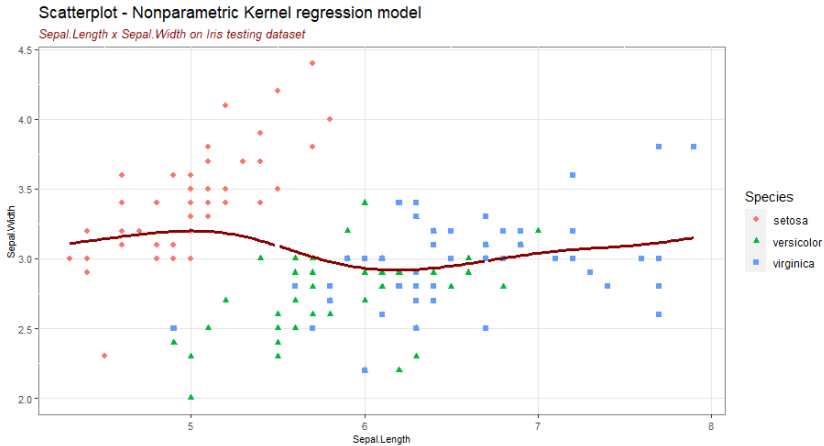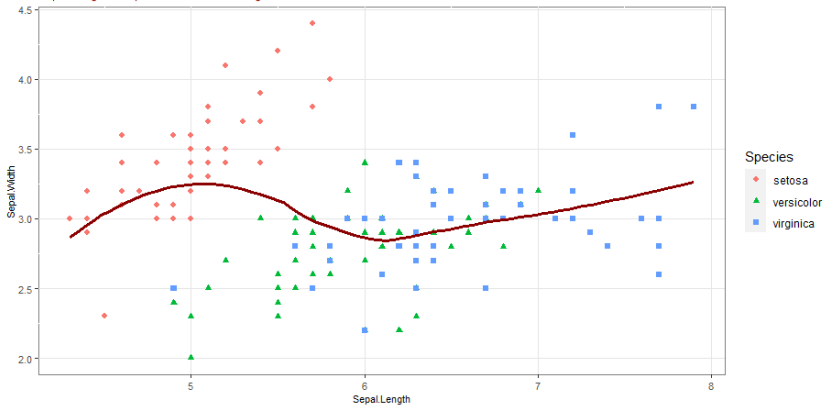
Nonparametric Smoothing Splines Regression

Scatterplot - Nonparametric Smoothing Splines regression model
Sepal.Length x Sepal.Width on Iris testing dataset

References

The R Project for Statistical Computing:
https://www.r-project.org/