



Rensselaer

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Lab 3: Classification & Clustering with Abalone

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Tetherless World Constellation
Rensselaer Polytechnic Institute



Lab 3



Exercise 1:

- Train and evaluate 2 kNN models using the abalone dataset
- Each model should use a different subset of features
- Compare models using contingency tables
- Find the optimal value k for the better performing model by training over a range of k values and choosing the value with the highest accuracy (accuracy = correct classifications / total observations)

Exercise 2:

- Train K-Means and PAM models for the abalone dataset using the best performing feature subset from the previous exercise
- Find the optimal value K for each model and plot a silhouette plot of the model with that K value.

Please push to your github repository:

1. All your code in a *.R or *.MD file
2. A doc(x)/pdf of the text outputs + figures.

Thanks!
Have a great weekend!*