

# STAT 380 – k-fold Cross Validation Supplement (Lecture 10)

Task: Using L08\_bmd.csv, implement kNN for predicting bmd using age, weight, and medication. Implement 10-fold cross validation for picking k in kNN. Use a seed of 123 when randomly permuting the folds. Create a plot showing as a function of and determine the optimal k.

- a. In order to perform kNN with 10-fold cross validation, what tasks are necessary?
- b. What will the loop control?
- c. What changes within each loop iteration?