

Name: \_\_\_\_\_

*This quiz totals 20 points. The quiz is open-note, but not open-neighbor. Relax and try to do the best you can.*

1. (5 points) What is the point of doing cross validation, and why is CV important?

Tying to find the optimal tradeoff between bias and variance

2. (5 points) Explain how to measure fit (i.e. prediction accuracy) in regression vs. classification models.

Mean-squared error, root mean squared error, mean absolute squared errors

F1, and confusion matrix (see solutions for more details)

Do not use mean-squared errors for a classification problem

3. (5 points) Name the five tribes of machine learning and write down the master algorithm of each.

Symbolists: tree models

Connectionists: nnet

Bayes : Support vector machines

Others are on the five tribes section

4. (5 points) Explain difference between supervised and unsupervised machine learning.

See answers