Cross Validation Notes

- The book introduces Cross-Validation in the section of chapter 2 titled “Better Evaluation Using Cross-Validation”.
- **sklearn’s brief introduction to cross validation**
- **sklearn.model_selection.cross_val_score**
- **Model evaluation, selection.cross_val_score’s scoring parameter**
- Using `[scoring="neg_mean_squared_error"]` for `[cross_val_score]` means the scores that are returned are from the negated MSE. But, each of the k-fold fits will use the regressor’s internal fitting score to minimize. For example, Lasso will still minimize MSE + alpha*L1(theta), LinearRegression will minimize MSE and RidgeRegression will minimize MSE + alpha * L2(theta). However, `[cross_val_score]` won’t report their internal scores. Instead it just reports MSE.

- To do your own customized scoring function you can pass a callable object that calculates the score to report. Be careful though. You want to be able to directly compare the scores for the results of different models.