Week6

How to evaluate a hypothesis.

Overfit: Fails to generalize to new examples not in training set.

Split the data set become a training set and a test set

70% to 30%

Valid set

Training, Valid set, and the Test set

->

Model selection

Choose the degree of the polynomial

Training 60%

Cross validation set 20% (CV)

Test set 20%

Training error

Cross Validation Set

Test Set

For different models. Instead of testing on the test set, we test the on the test set.

Diagnose the Bias problem and Variance problem

Training error decease when the degree of polynomial increase.

Bais: underfit

Variance: overfit

Go deeper in the overfitting by using regularization

Choosing the regularization parameter lambda