



deeplearning.ai


Comparing to human-
level performance

Improving your model
performance

The two fundamental assumptions of supervised learning

1. You can fit the training set pretty well. 

~ Avoidable bias

2. The training set performance generalizes pretty well to the dev/test set. 

~ Variance

Reducing (avoidable) bias and variance

Human-level

Avoidable bias

Training error

Variance

Dev error

Train bigger model

Train longer/better optimization algorithms
- momentum, RMSprop, Adam

NN architecture/hyperparameters search ^{RNN} _{CNN}

More data

Regularization

- L_2 , dropout, data augmentation

NN architecture/hyperparameters search