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

Andrew Ng

Reducing (avoidable) bias and variance

Human-level

Avoidable bias → Train bigger model

Training error

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

NN architecture/hyperparameters search $\quad$ RNN CNN

Variance →

Dev error

More data

Regularization
- L_2, dropout, Data augmentation

NN architecture/hyperparameters search

Andrew Ng