deeplearning.ai

Deep Neural Networks

Parameters vs Hyperparameters

What are hyperparameters?

Parameters: $W^{[1]}, b^{[1]}, W^{[2]}, b^{[2]}, W^{[3]}, b^{[3]}$ ...

Hyperparameters: Learning rate α

$\#$iterations

$\#$hidden layers L

$\#$hidden units $n^{[1]}, n^{[2]}, \ldots,$

Choice of activation function

Later: Momentum, mini-batch size, regularizations, ...

Applied deep learning is a very empirical process

Idea

$\alpha = 0.04$
0.05

Experiment   Code

Vision, Speech, NLP, Ad, Search, Recommendation.

cost J

α

# of iterations