Deep Neural Networks

deeplearning.ai

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

$\alpha = \cancel{0.01}$
0.05

Experiment   Code

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

cost J

α

# of iterations