

deeplearning.ai

Basics of Neural Network Programming

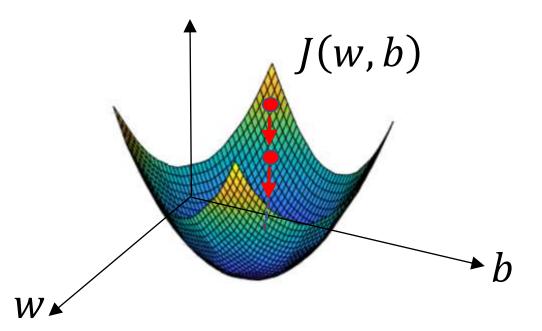
Gradient Descent

Gradient Descent

Recap:
$$\hat{y} = \sigma(w^T x + b)$$
, $\sigma(z) = \frac{1}{1 + e^{-z}}$

$$J(w, b) = \frac{1}{m} \sum_{i=1}^{m} \mathcal{L}(\hat{y}^{(i)}, y^{(i)}) = -\frac{1}{m} \sum_{i=1}^{m} y^{(i)} \log \hat{y}^{(i)} + (1 - y^{(i)}) \log(1 - \hat{y}^{(i)})$$

Want to find w, b that minimize J(w, b)



Gradient Descent

