

Logistic Regression as a Neural Network

- Video: Binary Classification

8 min
- Video: Logistic Regression

5 min
- Reading: Clarification about Upcoming Logistic Regression Cost Function Video

1 min
- Video: Logistic Regression Cost Function

8 min
- Reading: Clarification about Upcoming Gradient Descent Video

1 min
- Video: Gradient Descent

11 min
- Video: Derivatives

7 min
- Video: More Derivative Examples

10 min
- Video: Computation graph

3 min
- Video: Derivatives with a Computation Graph

14 min

- 6 min
- Video: Gradient Descent on m Examples

8 min
- Reading: Derivation of DL/dz (optional reading)

10 min

Python and Vectorization

- Video: Vectorization

8 min
- Video: More Vectorization Examples

6 min

- Reading: Clarification of "dz"

10 min

- Video: Vectorizing Logistic Regression

7 min
- Video: Vectorizing Logistic Regression's Gradient Output

9 min
- Video: Broadcasting in Python

11 min
- Video: A note on python/numpy vectors

6 min
- Video: Quick tour of Jupyter/iPython Notebooks

3 min
- Video: Explanation of logistic regression cost function (optional)

7 min

Practice Questions

Programming Assignments

Heroes of Deep Learning (Optional)

In the previous video, Andrew refers to $dz = a(1 - a)$.

Note that Andrew is using "dz" as a shorthand to refer to $\frac{da}{dz} = a(1 - a)$.

To clarify, earlier in this week's videos, Andrew used the name "dz" to refer to a different derivative: $\frac{dL}{dz} = a - y$.

Recall that the relationship between $\frac{dL}{dz}$ and $\frac{da}{dz}$ is:

$$\frac{dL}{dz} = \frac{dL}{da} \times \frac{da}{dz}$$

$$\frac{dL}{dz} = \frac{a-y}{a(1-a)} \times a(1-a) = a - y$$

Mark as completed

