

Deep Neural Networks

Lab 2

Exercises for this week

Get them from <http://bit.ly/2opx3kg> (dl1718.slack.com).

Exercise 4.ipynb - logistic regression

Exercise 5.ipynb - softmax regression and handwritten digits recognition

you can use neptune.ml (free \$100 + gpu) or colab.research.google.com if you don't want to set up your own env

1. Think about some heuristics to adapt learning rate during the training.
2. Compute the gradients for logistic regression.
3. Compute the gradients for softmax regression.
4. How to explain L1 regularization's preference for sparse solutions via gradient descent?