Training Neural Networks 2

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Neural Networks in Pytorch

Neural Network Modules

- nn.Embedding
  - An embedding layer, which is basically a look-up table
  - Takes the number of different embeddings and the embedding dimension as parameters
  - Expects a vector of indices as input

Neural Network Modules

- nn.LSTM
  - An LSTM layer
  - Takes the input dimension and the hidden dimension as parameters
  - Other optional parameters can be given, e.g.:
    - Dropout (expects a dropout probability)
    - Bidirectional (True/False)

In-Class Exercise: BYONNSC

- Download BYONNSC_masked.py from Canvas
- Fill in the TODOs in the code
  - (*Optional*:) You can use your network design from lecture 07, exercise 03
- What is the highest accuracy you can obtain?

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We will compare performances at the end of today's class!

Wrapping up

- Discussed today:
  - Not much…
  - …but we learned how to implement and train our own neural network!

- On Wednesday and next Monday: Project proposal presentations