

RNN + Assignment 8, 9

(Neural Networks Implementation and Application Tutorial)

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Overview

- Assignment 8
- Content
- Assignment 9

Assignment 8

TODO

Recurrent Neural Networks

- What's an RNN?
- What's it used for? What input can it *consume* and *produce*?
- How does it work?

RNN cells

- vanilla RNN
- LSTM
- GRU

Improvements

- Bidirectionality
 - ▶ Why?
- Multiple layers
 - ▶ How does that work?
 - ▶ Why would that be useful?

PyTorch peculiarities

- You can't have a “ragged tensor”
- All sequences in a batch must be *padded* to the same length

Assignment 9

- Start early
- Any questions?

Resources

TODO