

Deep Learning for NLP - Focus on Medical Applications

Review

Today

- What did we already learn (but forgot)
- Steps to training a network
- Introducing a new dataset (Aggressive Tweets)
- Applying a simple NN to the new dataset
- Representation Learning
- Convolutional Networks
- Applying CNNs to Text

What did we already learn

- Clean and Tokenize text using SpaCy
- Build neural networks with as many layers as needed
- Use different activation functions
- Use GPUs
- Regularize - what to do when we are overfitting
- Use different optimizers
- How to classify text into as many categories as we want
- How to Interpret simple networks

Steps

1. Load your dataset
2. Analyse your dataset, plot everything you can
3. Understand the problem and what needs to be done
4. Clean the dataset
5. Put your dataset into the right format for ML/DL
6. Build your network
7. Train your network
8. Check and plot metrics
9. Check the results, why and where are we making mistakes
10. Retrain with new insights