

Natural Language Processing with Deep Learning Class

Paweł Budzianowski, 2022

An over a decade of fascinating progress

- NLP <-> General ML
- ASR, TTS, Computer Vision, RL

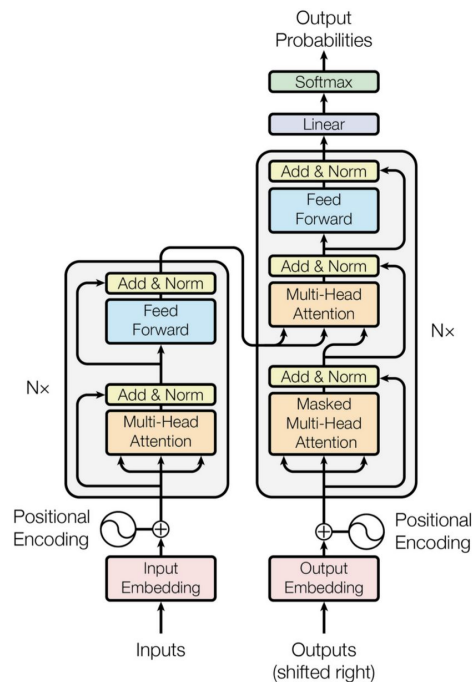


Figure 1: The Transformer - model architecture.

Figure 1: From 'Attention Is All You Need' by Vaswani et al.

MIM UW & IIMK UJ

1. Jagiellonian University, Faculty of Mathematics and Information Technologies
2. University of Warsaw, Faculty of Mathematics, Informatics, and Mechanics,

Lectures plan

1. Introduction to NLP and Meaning (28.02.2022)
2. Word vectors (07.03)
3. Language modeling (14.03)
4. RNNs (21.03)
5. Machine Translation, Attention (28.03)
6. Transformers (04.04)
7. Pre-training (Piotr Rybak, Allegro) (11.04)
8. Conversational AI (25.04)
9. Vision + language (Mateusz Malinowski, Deepmind) (09.05)
10. Vision + language (Mateusz Malinowski, Deepmind) (16.05)
11. Question-Answering (23.05)
12. Multilingual NLP (Ivan Vulić, Cambridge University) (30.05)
13. Data for NLP / Model Analysis (06.06)
14. New frontiers (TBD) (13.06)

Coursework plan

Practical 1 - 5% (due 15.03)

Practical 2 - 10% (due 21.03)

Practical 3 - 15%

Practical 4 - 15%

Practical 5 - 5%

Final proposal - 15%

Final report - 35%

Due date policy

1 day late: -10%

2 days late: -20%

3 days late: -30%

4 days late: -50%

5 days late: -100%

Attendance policy

Attendance will be checked at each lecture and practicals with possible perks.

Course slack

https://join.slack.com/t/dnlpclass/shared_invite/zt-141v925w5-FcX3MZiYPw5VNikA9BKdCQ

Questionnaire

https://docs.google.com/forms/d/e/1FAIpQLSd9A1U06NVL436qvHr9WTI4YtgAX-W9Zfm-j9kCk041Zm3j7w/viewform?usp=sf_link