

Using the Transformer

BERT-based architectures



Learning goals

- Understand the developments of the post-BERT era
- Get to know different self-supervised objectives
- Understand how to tackle BERTs critical shortcomings

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October 2018 - BERT

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February 2019 - GPT2

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The use **Permutation Language Modelling** to avoid the discrepancy between pre-training and fine-tuning introduced by the artificial MASK token.

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October 2019 - T5

T5 (Raffel et al., 2019) a complete **encoder-decoder** Transformer based architecture (**text-to-text transfer transformer**).

They approach transfer learning by transforming all inputs as well as all outputs to strings and fine-tuned their model simultaneously on data sets with multiple different tasks.

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