BERT Learns Numbers:

Training Transforms to Capture Quantity in Text

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Natural Language Processing

The U.S. records ??? total cases and another day of at least ??? deaths.

NUM year study of NUM reefs in NUM countries around the world reveals "sharks are functionally extinct on many of the world's reefs". Sharks were not observed on nearly NUM of surveyed reefs, suggesting a widespread decline that has gone undocumented on this scale until now.

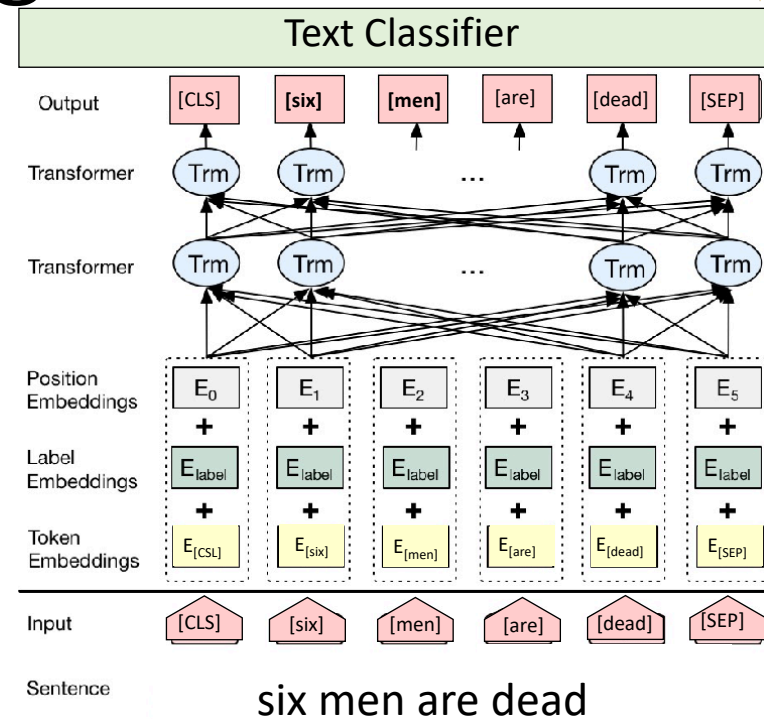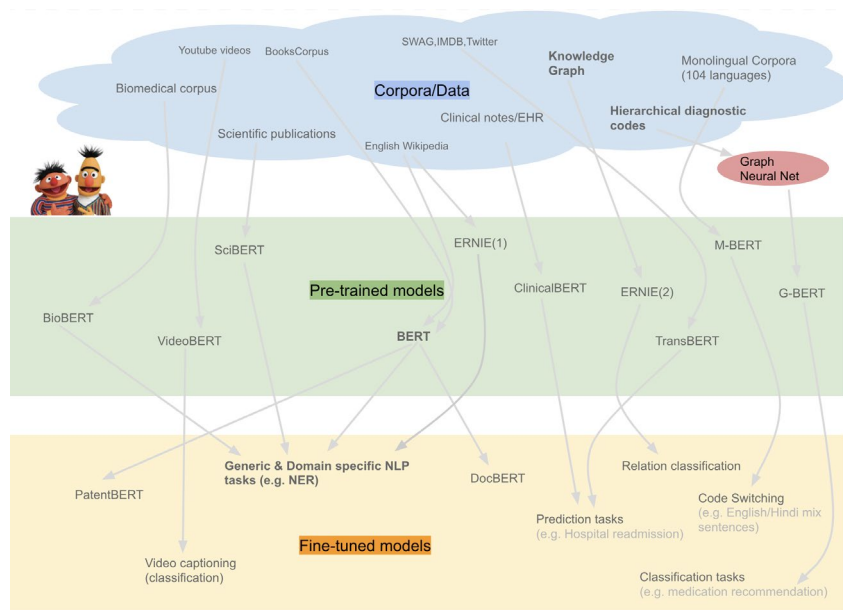news.ucsb.edu/2020/0...

A 10+ -year-old former Nazi SS concentration camp guard has been found guilty of complicity in the murder of more than 10+ prisoners. Bruno Dey was handed a 0-9 -year suspended prison sentence by a court in the German city of Hamburg.

bbc.com/news/w...

BERT: Transform Learning

Text Classifier

Training Data

Input Sentences from News	Hand Annotated Label
only three countries , the u.s., colombia and venezuela , had offered assistance.	Number: three Unit: countries
about 60 pct of usx's sales come from oil and natural gas.	Number: 60 Unit: pct

Natural Language Understanding

The U.S. records four million total cases and another day of at least 1,100 deaths.

Four year study of 371 reefs in 58 countries around the world reveals "sharks are functionally extinct on many of the world's reefs". Sharks were not observed on nearly 20% of surveyed reefs, suggesting a widespread decline that has gone undocumented on this scale until now.

news.ucsb.edu/2020/0... ⬀

A 93-year-old former Nazi SS concentration camp guard has been found guilty of complicity in the murder of more than 5,000 prisoners. Bruno Dey was handed a two-year suspended prison sentence by a court in the German city of Hamburg.

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