T5 Summarization

Saves you From the Information Boom

"Text-to-Text Transfer Transformer"(T5)

A neural network model developed by Google research team. It is one of the most advanced natural language models to date. It is trained on a mixture of unlabeled text and labeled data from popular natural language processing tasks. Unlike BERT, which had only encoder blocks, and GPT-2, which had only decoder blocks, T5 uses both.

What Can T5 Do?

Summarize:
"state authorities dispatched emergency crews Tuesday to survey the damage after an onslaught of severe weather ..."

Linguistic Acceptability:
"The course is jumping well."

Sentence Similarity:
"The rhino grazed on the grass. "; "A rhino is grazing in a field."

Translation:
English to German:
" That is good."

T5 Transformer

"Six people hospitalized after a storm in attala county."

"Not acceptable"

"3.8"
(Highly Similar)

"Das ist gut."
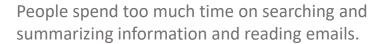
How T 5 Summarization Works?

T5 is capable for abstractive summarization which generates a summary based on the semantic understanding of original documents, therefore, not all words in the summary appear in original documents. The process is similar to the way humans read an article and then summarize it in their own words.

Original Document → Understand Context → Semantics → Generate Own Summary

TEAM 8: Jiatong Li, Mark Chen, Xiaowen Tang, Weizhong Yao
GitHub:https://github.umn.edu/tang0626/TrendMarket

Business Application

Information Boom Problem

People spend too much time on searching and summarizing information and reading emails.

2.5 Hours
per day searching for information needed

25 %
of the workday on email-related tasks

How Can T5 Saves Time and Energy?

Working with other Python tools such as "Fransc" (audio conversion library), T5 Transformer can be applied in different business scenarios to save your time and energy.

Recap Meeting Recordings

Impossible to remember every key points from countless?

- T5 can help you recap important meeting notes.
- T5 Saves your time as well as prevent you from missing any important points.

Compress Reading   Materials

Overwhelming by articles and news?

- T5 can downsize hundreds of articles into several pages.
- Adjust the summary with less complicated words if articles are too abstract.
- T5 Improve your working efficiency.

Summarize User Feedbacks

Getting sloppy for numerous user feebacks and responses about products?

- T5 can offer a direct and "honest" summary of those responses by briefing the essential ideas.
- T5 keep you objective and accurate

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