Prompt Engineering

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ChatGPT use cases for NLP

Prompt Engineering for information retrieval

Data Augmentation

Transfer Learning to smaller models

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More use cases!

ChatGPT use cases for NLP

Prompt Engineering for information retrieval

Data Augmentation

Transfer Learning to smaller models

Open AI embeddings for Semantic Search

Today's Focus

- Prompt Engineering for information retrieval
- Data Augmentation
- Transfer Learning to smaller models

Prompt Engineering - Notebook Demo

Let’s go take a look!

Pointers for effective prompt engineering

- **Clarity in Instructions, Goals**
- **Providing context**
- **Specificity/Conciseness**

Pointers for effective prompt engineering

Clarity in Instructions, Goals

Providing context

Specificity/Conciseness

Example from the notebook

The key word doesn’t have to be present in the text. Also the key word shouldn’t have a space in it.

Pointers for effective prompt engineering

Clarity in Instructions, Goals

Providing context

Specificity/Conciseness

Pointers for effective prompt engineering

Clarity in Instructions, Goals

Providing context

Specificity/Conciseness

Example from the notebook

One question should be something a five year old would ask. Another second should be something a mature adult would ask.

Pointers for effective prompt engineering

Clarity in Instructions, Goals

Providing context

Specificity/Conciseness

Pointers for effective prompt engineering

Clarity in Instructions, Goals

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Example from the notebook

Generate 3 distinct key words that capture the most important topics in the text.

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Specificity/Conciseness

Chain of Thought Prompting

Example from the notebook

Explain step by step. Use of <think> tags and <answer> tags

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Chain of Thought Prompting

In-Context Learning

ICL

Zero-shot vs Few-short in-context learning

Pointers for effective prompt engineering

Clarity in Instructions, Goals

Providing context

Specificity/Conciseness

Chain of Thought Prompting

In-Context Learning vs RAG Models

ICL vs RAG

In In-context Learning - All data is provided within the context window.

In RAG - First a database of docs is searched before generation from a single relevant doc