Apply Pre-Trained Models

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NLP Model Tasks

Input Text

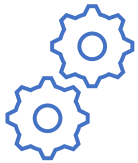
Word Embedding
(usually also based on Neural Network)

Neural Network

Prediction

„I like this book so much I cannot “

0	1	1	0
1	0		1
		…	
	0		1



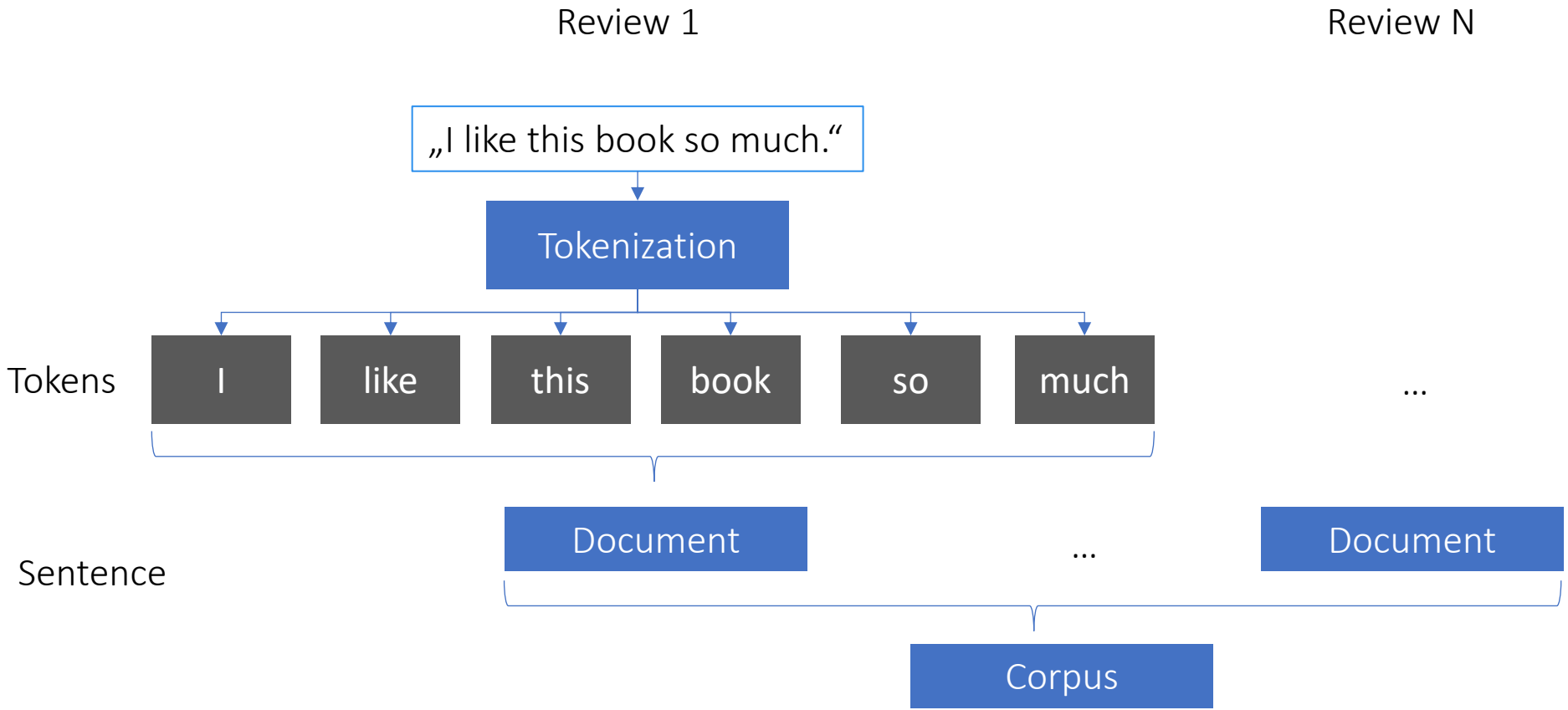
…

Text is converted to numerical representation.

Neural Networks can only consume numbers, not text!

Apply Pre-Trained Models

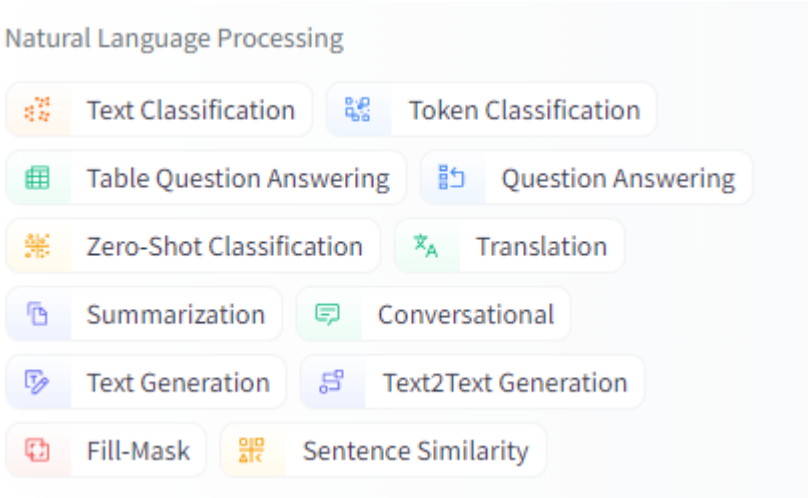
Vocabulary



Apply Pre-Trained Models

Introduction

- often you don‘t want to train a word embedding / NLP model
- instead use a pre-trained model directly
- huggingface.co provides lots of models



Source: https://huggingface.co/models

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Coding examples - Sentiment

sentiment-analysis

```
data
✓ 0.0s
' I like them. I mean I like what`s left of them.'
```

```
sentiment_pipeline(data)
✓ 0.0s
[{'label': 'POSITIVE', 'score': 0.9796609878540039}]
```

nlptown/
bert-base-multilingual-uncased-sentiment

```
'Das finde ich ganz ok.'
```

```
[{'label': '3 stars', 'score': 0.534758448600769}]
```

Different models available for the same task.