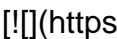
 Hugging
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Train

Deploy

Use this model

- * `sentence-transformers/facebook-dpr-ctx_encoder-multiset-base`
- * Usage (Sentence-Transformers)
- * Usage (HuggingFace Transformers)
- * Evaluation Results
- * Full Model Architecture
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`sentence-transformers/facebook-dpr-ctx_encoder-multiset-base`

This is a port of the [DPR Model](<https://github.com/facebookresearch/DPR>) to [sentence-transformers](<https://www.SBERT.net>) model: It maps sentences & paragraphs to a 768 dimensional dense vector space and can be used for tasks like clustering or semantic search.

Usage (Sentence-Transformers)

Using this model becomes easy when you have [sentence-transformers](<https://www.SBERT.net>) installed:

```
pip install -U sentence-transformers
```

Then you can use the model like this:

```
from sentence_transformers import SentenceTransformer

sentences = ["This is an example sentence", "Each sentence is converted"]

model = SentenceTransformer('sentence-transformers/facebook-dpr-ctx_encoder-multiset-base')

embeddings = model.encode(sentences)

print(embeddings)
```

Usage (HuggingFace Transformers)

Without [sentence-transformers](<https://www.SBERT.net>), you can use the model like this: First, you pass your input through the transformer model, then you have to apply the right pooling-operation on-top of the contextualized word embeddings.

```
from transformers import AutoTokenizer, AutoModel

import torch
```

```

def cls_pooling(model_output, attention_mask):
    return model_output[0][:,0]

# Sentences we want sentence embeddings for
sentences = ['This is an example sentence', 'Each sentence is converted']

# Load model from HuggingFace Hub

tokenizer =
AutoTokenizer.from_pretrained('sentence-transformers/facebook-dpr-ctx_encoder-multiset-base')

model =
AutoModel.from_pretrained('sentence-transformers/facebook-dpr-ctx_encoder-multiset-base')

# Tokenize sentences
encoded_input = tokenizer(sentences, padding=True, truncation=True, return_tensors='pt')

# Compute token embeddings
with torch.no_grad():
    model_output = model(**encoded_input)

# Perform pooling. In this case, max pooling.
sentence_embeddings = cls_pooling(model_output, encoded_input['attention_mask'])

print("Sentence embeddings:")
print(sentence_embeddings)

```

Evaluation Results

For an automated evaluation of this model, see the [_Sentence Embeddings](#)

Benchmark_ :

[<https://seb.sbert.net>](https://seb.sbert.net?model_name=sentence-transformers/facebook-dpr-ctx_encoder-multiset-base)

Full Model Architecture

SentenceTransformer(

(0): Transformer({'max_seq_length': 509, 'do_lower_case': False}) with Transformer model:

BertModel

(1): Pooling({'word_embedding_dimension': 768, 'pooling_mode_cls_token': True, 'pooling_mode_mean_tokens': False, 'pooling_mode_max_tokens': False, 'pooling_mode_mean_sqrt_len_tokens': False})

Citing & Authors

Have a look at: [\[DPR Model\]\(https://github.com/facebookresearch/DPR\)](https://github.com/facebookresearch/DPR)

Downloads last month

23,316

Safetensors[[\]\(https://huggingface.co/docs/safetensors\)](https://huggingface.co/docs/safetensors)

Model size

109M params

Tensor type

I64

.

F32

.

Inference Providers [NEW](<https://huggingface.co/blog/inference-providers>)

[Sentence Similarity](/tasks/sentence-similarity "Learn more about sentence-similarity")

This model is not currently available via any of the supported third-party Inference Providers, and the model is not deployed on the HF Inference API.

System theme

Company

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