



OpenAI Embeddings

If you're opening this Notebook on colab, you will probably need to install LlamaIndex 🦙.

```
%pip install llama-index-embeddings-openai
```

```
!pip install llama-index
```

```
import os
```

```
os.environ["OPENAI_API_KEY"] = "sk-..."
```

```
from llama_index.embeddings.openai import OpenAIEmbedding
from llama_index.core import Settings
```

```
embed_model = OpenAIEmbedding(embed_batch_size=10)
Settings.embed_model = embed_model
```

Using OpenAI `text-embedding-3-large` and `text-embedding-3-small`

Note, you may have to update your openai client: `pip install -U openai`

```
# get API key and create embeddings
from llama_index.embeddings.openai import OpenAIEmbedding

embed_model = OpenAIEmbedding(model="text-embedding-3-large")

embeddings = embed_model.get_text_embedding(
    "Open AI new Embeddings models is great."
)
```

```
print(embeddings[:5])
```

```
[-0.011500772088766098, 0.02457442320883274, -0.01760469563305378, -  
0.017763426527380943, 0.029841400682926178]
```

```
print(len(embeddings))
```

```
3072
```

```
# get API key and create embeddings  
from llama_index.embeddings.openai import OpenAIEmbedding  
  
embed_model = OpenAIEmbedding(  
    model="text-embedding-3-small",  
)  
  
embeddings = embed_model.get_text_embedding(  
    "Open AI new Embeddings models is awesome."  
)
```

```
print(len(embeddings))
```

```
1536
```

Change the dimension of output embeddings

Note: Make sure you have the latest OpenAI client

```
# get API key and create embeddings  
from llama_index.embeddings.openai import OpenAIEmbedding  
  
embed_model = OpenAIEmbedding(  
    model="text-embedding-3-large",  
    dimensions=512,  
)  
  
embeddings = embed_model.get_text_embedding(  
    "Open AI new Embeddings models with different dimensions is  
awesome."  
)  
print(len(embeddings))
```

512