

# Zero-Shot Learning vs. Few-Shot Learning

## Learning Portfolio 1

# Zero-Shot Learning vs. Few-Shot Learning

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**Zero-Shot Learning** refers to an approach to ML, where a model estimates a prediction on a task that it was not trained on and that was not included in the training data.

**Few-Shot Learning** refers to an approach to ML, where a model estimates a prediction on a task that it was trained on and that was included in the training data.

# Large-Language Model APIs

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Large Language Models like Cohere and ChatGPT can be queried using lightweight python libraries.

<https://docs.cohere.com/reference/generate>

<https://platform.openai.com/docs/introduction/overview>

```
!pip install cohere
import cohere

apikey_cohere = 'TGYoczX3zLdkPtaRIWtyeFgbZQssE7E0BnfP7tPj'

def cohere_text(prompt: str, tokens: int) -> str:
    co = cohere.Client(apikey_cohere)

    response = co.generate(
        model='xlarge',
        prompt = prompt,
        max_tokens=tokens,
        temperature=0.75,
        stop_sequences=["\n\n"])

    return response.generations[0].text
```

```
response = openai.Completion.create(model="text-davinci-003",
                                     prompt=prompt, temperature=0,
                                     max_tokens=10)

return response["choices"][0]["text"]
```

# Homophobic Content Moderation

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Large language model APIs and Few-Shot-Learning can be used to detect whether a social media post contains homophobic content. The post is classified by the Language Model and can be forwarded to a human agent or immediately deleted from the platform.

```
[ ] results = []
    correct = 0

    for test_data in test_data_set:
        classification = classify_post(test_data[0])
        results.append(classification.strip())

    for index, result in enumerate(results):
        if result == test_data_set[index][1]:
            correct += 1

    print("Correct percentage: " + str(correct/len(test_data_set)*100) + " %")
```

Correct percentage: 90.0 %

# Kontakt

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