Hugging Face Models

Lesson Downloads

Show TranscriptSummarize Video

Hugging Face models provide a quick way to get started using models trained by the community. With only a few lines of code, you can load a pre-trained model and start using it on tasks such as sentiment analysis.

Quiz Question

What does calling a model's no_grad method imply?

- The model gradients are being calculated intensively.
- The sentiment analysis will be more accurate.
- The model is being used only for prediction, not for training.
- The model is broken and needs repair.

Submit

Code Example

```
from transformers import BertForSequenceClassification, BertTokenizer

# Load a pre-trained sentiment analysis model
model_name = "textattack/bert-base-uncased-imdb"
model = BertForSequenceClassification.from_pretrained(model_name, num_labels=2

# Tokenize the input sequence
tokenizer = BertTokenizer.from_pretrained(model_name)
inputs = tokenizer("I love Generative AI", return_tensors="pt")

# Make prediction
with torch.no_grad():
    outputs = model(**inputs).logits
    probabilities = torch.nn.functional.softmax(outputs, dim=1)
    predicted_class = torch.argmax(probabilities)

# Display sentiment result
if predicted_class == 1:
    print(f"Sentiment: Positive ({probabilities[0][1] * 100:.2f}%)")
else:
    print(f"Sentiment: Negative ({probabilities[0][0] * 100:.2f}%)")
# Sentiment: Positive (88.68%)
```

Resources

[Hugging Face Transformers documentation index]
[Hugging Face models search]
[textattack/bert-base-uncased-imdb model documentation on Hugging Face]
[Hugging Face BertForSequenceClassification documentation]
[torch.nn.functional.softmax documentation]
[torch.argmax documentation]