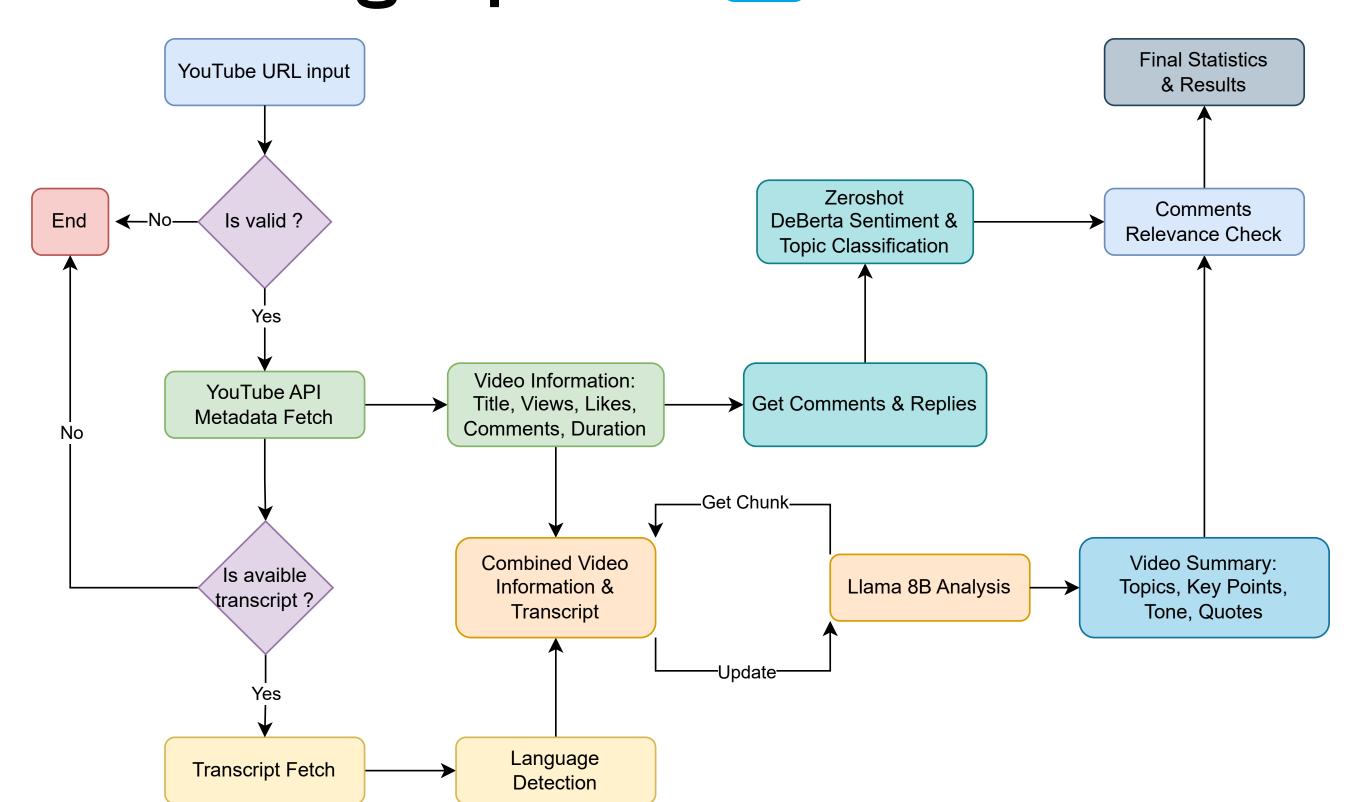


Matěj Putík

Introduction and Goals ©

- Creating a YouTube video analysis tool
- Extracting and analyzing video metadata and transcripts
- Performing sentiment and topic analysis on comments Building threaded comment analysis with reply detection
- Generating structured console output

Processing Pipeline



Natural Language Processing (4)



Sentiment Analysis:

- Zero-shot classification
- DeBERTa v3 large model
- Multiple sentiment categories:
 - Neutral

Positive

- Negative ②
- Enthusiastic
- Critical
- **Topic Classification:**
- Context-aware relevance
- Multiple topic categories:
 - Questions ?
 - Opinions

Facts

- Complaints
- Praise
- Suggestions

"This tutorial was incredibly helpful! The explanations were clear and I learned a lot. Could you make more videos like this? "

• Enthusiastic 🐸 (0.92) and Praise 👋 (0.85)

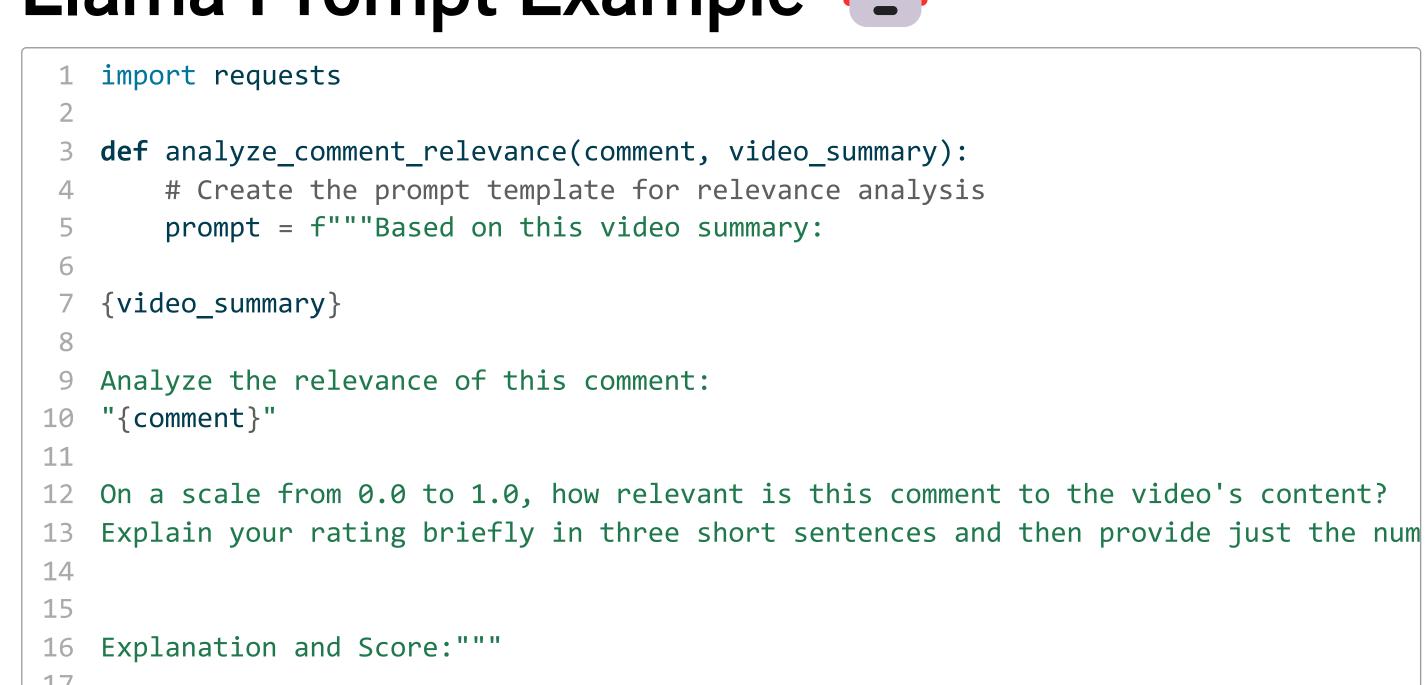
Zero-shot Classification Example



```
1 #!pip install transformers[sentencepiece]
2 from transformers import pipeline
3 text = "Three girls - Alice, Beth, and Carol - are solving a riddle. Alice sits to
4 hypothesis_template = "This example is about {}"
5 classes_verbalized = ["logic puzzle", "mathematics", "storytelling", "fashion"]
6 zeroshot_classifier = pipeline("zero-shot-classification", model="MoritzLaurer/deb")
7 output = zeroshot_classifier(text, classes_verbalized, hypothesis_template=hypothe
8 print(output)
```

{'sequence': 'Three girls - Alice, Beth, and Carol - are solving a riddle. Alice sits to the left of the person wearing blue. Beth is not wearing red. The person on the right is wearing green. Can you determine what color each girl is wearing?', 'labels': ['logic puzzle', 'fashion', 'storytelling', 'mathematics'], 'scores': [0.40644246339797974, 0.3627837598323822, 0.22846822440624237, 0.0023055586498230696]}

Llama Prompt Example



Llama Prompt Example

Call Ollama API



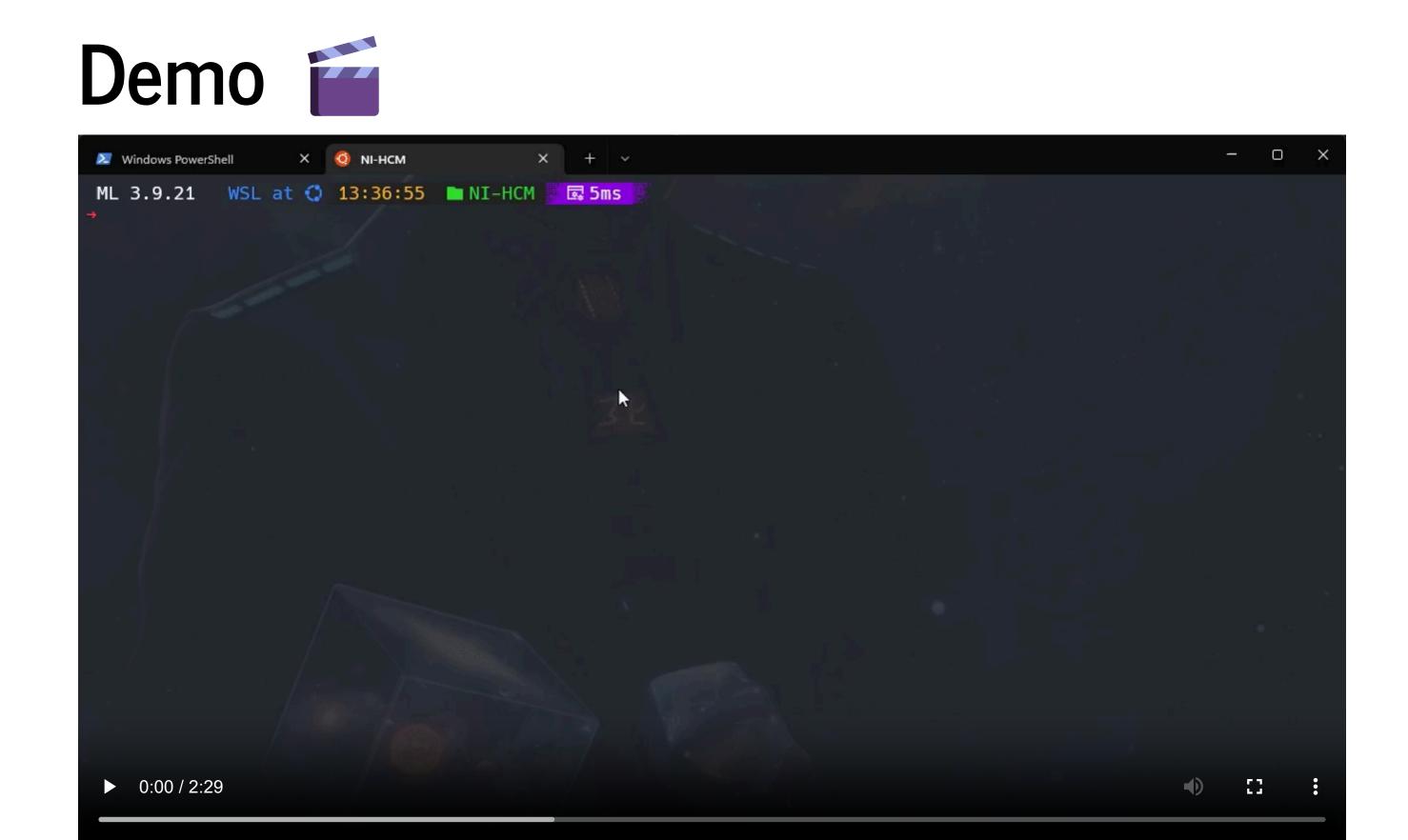
Analyzing comment: Nice video! Please do more tutorials! -----

This comment is mildly relevant to the video's content as it expresses a general sentiment of appreciation for the video without providing any specific feedback or connection to the technical topics discussed. However, it does not demonstrate an understanding of the quantum computing concepts presented.

Relevance score: 0.2

Analyzing comment: The explanation of decoherence reduction was brilliant, especially the part about environmental isolation techniques! -----

This comment is highly relevant to the video's content because it specifically



Questions ?

