

Multimodal Sentiment Analysis

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Task

Sentiment analysis of Youtube news videos

- ▶ Fuse information from visual and text signals
- ▶ Combine information from the video itself with Youtube metadata and related social media data

Data Used

- ▶ News clips from the CNN Youtube channel
 - ▶ Video
 - ▶ Transcript
 - ▶ Title
 - ▶ Description
 - ▶ Comments
- ▶ Related Twitter tweets

Ideas on Techniques

Co-training

- ▶ Video content
 - ▶ Facial expressions
 - ▶ Gestures
 - ▶ Transcript
 - ▶ Scenes Portrayed (Violen)
- ▶ Audio
 - ▶ Tone
 - ▶ Volume
- ▶ Metadata
 - ▶ Youtube title
 - ▶ Youtube description
 - ▶ Youtube comments
 - ▶ Related tweets

Why Is It Cool?

- ▶ Multimodal analysis has shown promise in a variety of fields
- ▶ Sentiment is tied up in mediums other than text
- ▶ The field of sentiment analysis would benefit from the creation of a framework for multimodal processing

Contributions

- ▶ Natural Language Processing
 - ▶ Combining text from different fields (video title, description, comments, tweets)
- ▶ Machine Learning
 - ▶ Fusing features extracted from different modalities
- ▶ Web Technologies
 - ▶ Gathering related content from different sources (Youtube, Twitter)