Live Sentiment Annotation of Movies via Arduino and a Slider

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1 Motivation & Background

Sentiments and emotions are an important aspect for the analysis and understanding of movies and narrative art in general.

Annotations of sentiment are important for machine learning based sentiment analysis.

Current approaches:

<table>
<thead>
<tr>
<th>ID</th>
<th>Subtitle</th>
<th>Annotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Tesseract has awakened</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>It is on a little world. A human world.</td>
<td>-3</td>
</tr>
<tr>
<td>3</td>
<td>They would wield its power,...</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>But our ally knows its workings as they</td>
<td>1</td>
</tr>
</tbody>
</table>

However textual sentiment annotation is:

- Tedious and time consuming
- Challenging
- Prone to the subjectivity of annotators
- Neglects the multimodality of the medium

We argue that live sentiment annotation while watching the movie is:

- Easier and more fun
- More intuitive
- Inclusive of all modalities

2 Live Sentiment Annotation

Arduino (blue) connected to a slider with integrated potentiometer (red)

Prototype of the slider casing

User Interface of the live application

3 Feedback

We are currently conducting first preliminary tests comparing our approach to textual annotation and computational approaches.

Feedback: more enjoyable, sentiment rating is easier, no “overthinking” possible

4 Further Reading