

10.04 Meeting

Thesis:

No1.

1. Collect data for emotions, Rating and eye tracking
2. Calculate similarities between users based on emotions/rating/eye tracking (each)
3. Calculate accuracy for predictions based on the 3 similarities from above
4. Compare it (Experiment)

No2.

If there are lot of fixation points, the participant is interested

Amount of the fixation per duration of the video (each video)

- ➔ Number of fixations per second (Rate)
 - ➔ Number of fixations per video (Rate)
- Compare it with the Interest-Ranking of the Questionnaire

Methods

1. Videos

9 videos (max. 3 min Trailer)

- Categories:
 - Emotional/Love: A, B, C
 - Horror: D, E, F
 - Comedy/ Action: G, H, J

2. Participants

The participants would consist of 20 person (10 Male, 10 Female) which are University students between ages of 22 and 29.

3. Questionnaire

At beginning of the experiment the participant would have to answer to a demographic questionnaire which would consist of 10 questions and will be done via google Forms.

4. Experiment

Each participant has to watch total of 6 different videos from categories emotional/love, horror and comedy and would rate each of them based on his/her liking. There would be a collection of the emotional feedback from the user about that specific video as well. During each video, all the eye movement data would be recorded.

5. Video Questionnaire

After the user is done with the designed video, he/she has to answer few questions about the current video experience and give any feedback he/she may have.

6. Evaluation and Analysis

Based on each user's Rating and Eye Tracking data, we would pair users which are most similar to each other. Then we would compare their emotional feedbacks that they gave for each video and determine the accuracy of our similarity algorithm for each pairs. There is also another step to take, which is to find hidden relationship between parameters like Gender and Rating that the user gave.

Table for eye tracking – Similarities (example)

	User 1 – User 2	User 1 – User 2	User 1 – User 3	User 2 – User 3
Video 1	17%	15%	25%	42%
Video 2	..	..	..	..
Video 3	..	..	..	..
Average	24 %	..	..	..
Standard Deviation	0.4	..	..	..

Next Step:

➔ Find an algorithm to calculate similarities

First idea:

Ranking/Emotion(one category)

Based on the 5-Star-Rating, we can calculate for each category the sum of $(| \text{Rating}(\text{User A}) - \text{Rating}(\text{User B}) |) / \# \text{category}$ = The Mean Average Distance of the Rating System

The smaller the value, the bigger the similarity