

CSCI Assignment 1

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Question 1:

The value of Fleiss' kappa inter-annotator agreement on the whole set is **0.650311**.

According to table 1, the inter-annotator agreement between the annotators can be interpreted as **substantial agreement**.

Question 2:

The value of Cohen's kappa inter-annotator agreement between each **annotator 1** and the result of the majority vote is **0.89455**.

The value of Cohen's kappa inter-annotator agreement between each **annotator 2** and the result of the majority vote is **0.78418**.

The value of Cohen's kappa inter-annotator agreement between each **annotator 3** and the result of the majority vote is **0.79799**.

Ranking: **Annotator 1, Annotator 3, Annotator 2**

Question 3:

In this scenario where annotator 1 has higher familiarity with this task and therefore his vote is assigned twice the weight as annotator 2 and 3, the ties of votes can be observed when Annotator 2's rating is same as Annotator 3's rating but different from Annotator 1's rating. According to my understanding, in such a scenario we should give more priority to the rating given by Annotator 2/3 since its judged by two people as same but gets a tie due to more weightage given to rating of Annotator 1 who could be wrong (even after high familiarity). (2 responses compared to 1).

Question 4:

The cues I observed correlated to different type of opinions are:

1) Positive:

- a) Smile on the face, confidence on face
- b) Excitement in the tone
- c) Looking directly towards the camera/screen

2) Neutral:

- a) Gaze change either towards side or upward
- b) Extra explanations
- c) Calmness in tone

3) Negative:

- a) Downward gaze
- b) Pausing in between
- c) Anger in tone
- d) Seriousness in tone
- e) Increase in pitch
- f) Eyebrow movement

The cues which I want to focus on four experiments and question 5 include **tone + expression**, and **gaze**.

Question 5:

According to the cues observed:

1) Tone + expression

The rating for tone would have values:

1: Excitement, happy expression,

0: Calmness, neutral reaction

-1: anger, high pitch

The Pearson correlation coefficient for **0h-zjBukYpk** * video clips is **0 . 616952**.

The Pearson correlation coefficient for **1DmNV9C1hbY** * video clips is **0 . 766964**.

2) Gaze

The rating for tone would have values:

1: eyes to the screen

0: side/upward gaze

-1: Downward gaze

The Pearson correlation coefficient for **0h-zjBukYpk** * video clips is **0 . 5903922**.

The Pearson correlation coefficient for **1DmNV9C1hbY** * video clips is **0 . 710219**.