

## Text Analytics: Practical 9 (for Lecture 9: Sentiment Identification)

- 1) Human Ratings Task:
  - a) Get 3 classmates (opinion holders) to write three different opinions about their phone
  - b) Get 3 different people (raters) to rate these comments as positive, negative, neutral or can't-say
  - c) Take this 3 x 3 matrix and find the inter-rater reliability between your 3 raters using Kappa
  - d) If you wanted to get the correlation between raters (using Pearson's  $\rho$ ) what would you do? Then do this.
- 2) Do some searches and find 3 sentiment lists that are commonly used in previous research. For 2 of these lists, select 10 positive and 10 negative words (randomly).

Evaluate each word, discussing whether it is really positive/negative; for each one try to find a sentential context in which it might be interpreted with the opposite valence.

- 3) Bromberg's Sentiment Program:

Have a look at the simple program that does sentiment analysis. So, take a look at the program and see what is happening in the different variables, but adding print statements on its variables.

  - a) Now consider ways to improve the training. Eg if you removed stop-words from the inputs what do you think might happen?
  - b) Implement this or another solution in the program and report what happens to the precision and recall of the classifier.