

MIS0855: Data Science

In-Class Exercise for Wed, Apr 8 – Determining the Sentiment of Textual Data

Objective: Differentiate between positive and negative sentiment in text

Learning Outcomes:

- Perform a manual sentiment analysis of a Twitter stream
- Develop rules for classifying a message as positive or negative
- Explain the problems and issues with accurately describing sentiment within text

Part 1: Individual (10 minutes)

- 1) Visit two Twitter feeds for well-known brands that you're familiar. You can choose any brand you want for this, but if you need some ideas.

CocaCola	@CocaCola	http://twitter.com/cocacola
McDonalds	@McDonalds	http://twitter.com/mcdonalds
Honda Motors	@Honda	http://twitter.com/honda
Starbucks	@Starbucks	http://twitter.com/starbucks
Nike	@Nike	http://twitter.com/nike
H&M	@hm	http://twitter.com/hm

- 2) Within feed, click on a few tweets and read the replies.
- 3) Find three examples of positive tweets, three examples of negative tweets, and three examples of neutral tweets (neither positive nor negative). Write them down in three lists.
- 4) Make a note of why you classified them as positive, negative, or neutral.

Part 2: Group (10 minutes)

- 1) In a group of three or four, share your lists of positive and negative tweets. See if you agree with each other's choices.
- 2) Come up with rules for determining whether a tweet is positive or negative. For example:
 - a. Are there certain words which increase your certainty of how to classify the tweet?
 - b. Are there certain tweets that sound positive but really are negative?
 - c. How do you detect sarcasm?
 - d. How would you explain to someone how to classify tweets?

Part 3: Discussion (10 minutes)

We'll compare notes. Specifically, we will discuss:

- What are some rules for determining positive versus negative sentiment?
- Were some tweets difficult to categorize? Why?
- In what ways would this be a good method of understanding how people felt about your brand? In what ways could it give you bad information?

Send your group's note to minspang@temple.edu by 10AM.