

COSC 2671 Social Media and Network Analytics

Tute Week 3

Sentiment Analysis

Learning outcomes:

- Reinforce and go deeper into sentiment analysis concepts

Introduction

1. Consider the following review text. Using the 5 tuple format, identify at least 5 different types of entity, aspects, opinions and opinion holder (do not worry about the time).

Ms X

I have constantly had horrible shipping and delivery issues with Amazon. When reaching out to customer service there is no accountability. You cannot review their shipping and delivery because Amazon will refuse to post the review as they do not want to be called out on their terrible failure to meet their own set 2-day turnaround service. I pay for prime membership and I notice if I have something set to deliver on a Sunday, it rarely comes. I have had my address marked as, "Business Closed" even though it is a house because USPS did not want to deliver. ONTRAC has delivered items to the wrong address, after hours, the next day (after the date scheduled for delivery) or not at all, and Amazon will tell me to reach out to them. Amazon is the one that chose the shipping company, not I, they need to reach out. Amazon has gotten progressively worse over the years and meeting the 2-day commitment that Prime members pay for does not seem to be something they can adhere to. They breach that contract frequently and I see a class action lawsuit looming in their future.

(retrieved from <https://au.trustpilot.com/review/www.amazon.com>, 5/8/19)

2. Consider (document) sentiment classification. There are supervised and unsupervised approaches. Outline the challenges of both supervised and unsupervised. For unsupervised approach, explain the rationale behind Turney's method (the one based on PMI).
3. Describe how the semi-supervised approach to sentiment classification works, particularly why it can include partial supervision.
4. Outline the steps needed to identify the frequent aspects. Discuss some possible weaknesses in this method?

5. Consider the following phrases. Using sentiment consistency, generate a corpus based lexicon.

“happy and excited”

“sad but energetic”

“dislike but acceptable”

“sad and unhappy”

“excited and interested”

“sincere and excited”

“sincere and energetic but dislike”

“accepted and happy:

“dislike and unhappy”