Detecting Opinion Spammer Groups

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Abstract—This paper aims to detect opinion spammer groups on the Yelp dataset.

I. Introduction

This chapter shows the motivation of why this topic is important.

II. Related Work

In this section we show important work which has been made by other researchers like [2] and [1].

In this section we also want to highlight why this approach can be beneficial for this research area.

III. Yelps Review System

In this section we shortly describe how Yelps review system works.

IV. Dataset

In this section we shortly describe the Yelp dataset.

V. Feature

In this section we descripe approximately 3 features we want to experiment with.

VI. Model

In this section we describe our model/graph which aims to find opinion spamming groups.

VII. Results/Analysis

In this section we show our plots and describe the results/interpretation.

VIII. Conclusion

IX. Experimental plots
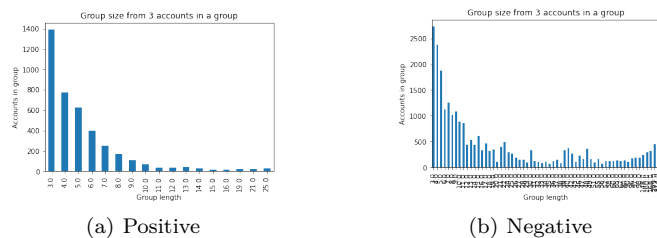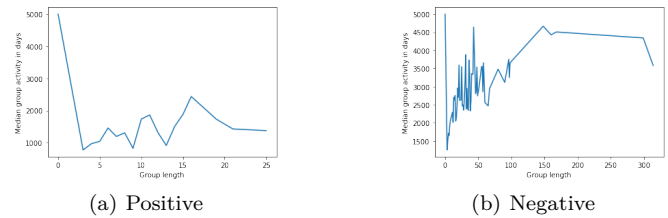
200.000 rows of the review json

(a) Positive   (b) Negative

Figure 1: Groups

(a) Positive   (b) Negative

Figure 2: Activity

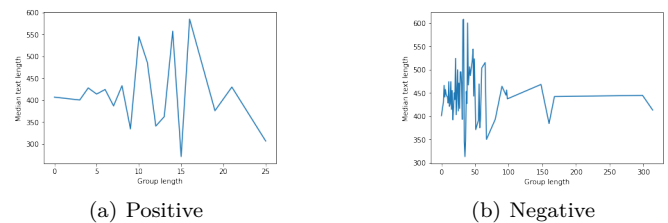(a) Positive   (b) Negative
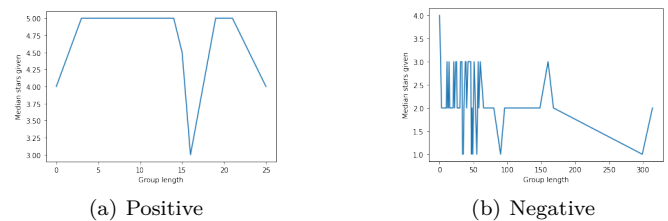
Figure 3: Length

(a) Positive   (b) Negative

Figure 4: Stars

References

[1] Euijin Choo, Ting Yu, and Min Chi. Detecting opinion spammer groups through community discovery and sentiment analysis. In IFIP annual conference on data and applications security and privacy, pages 170–187. Springer, 2015.

[2] Arjun Mukherjee, Abhinav Kumar, Bing Liu, Junhui Wang, Meichun Hsu, Malu Castellanos, and Riddhiman Ghosh. Spotting opinion spammers using behavioral footprints. In Proceedings of the 19th ACM SIGKDD international conference on Knowledge discovery and data mining, pages 632–640, 2013.