Universiti Teknologi MARA

Visualization of Public Sentiment from Crime News in Social Media

Syairah Binti Ibrahim

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SUPERVISOR APPROVAL

VISUALIZATION OF PUBLIC SENTIMENT FROM CRIME NEWS COMMENTS IN SOCIAL MEDIA

By

SYAIRAH BINTI IBRAHIM
2015208726

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Approved by

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Mohammad Bakri bin Che Haron
Project Supervisor

JULY 6, 2017

STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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SYAIRAH BINTI IBRAHIM
2015208726

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ABSTRACT

Social media has become a sole of our communications and platform for sharing information. Among all the social media, Facebook has become an important platform for news sharing as well as engaging in discussions about a certain topic, issues or events. Through discussions, public expresses their opinions via text and symbols. Sentiments analysis is a research area that studies this data to get public's opinion, their feelings, and emotions. However, analysing the public emotions can be cumbersome. Further approaches are needed as there are numerous ways for public to express their emotions such as using an emoticon or through text. Hence, many research have been done in analysing sentiments using languages such as English, Chinese, and Arabic. However, there are a limited number of research that analyses and visualize sentiments into an understandable format using Malay language. The aim of this project is to develop a prototype that visualizes sentiments from Facebook comments based on crimes news in Malay. For this purpose, filtering and pre-processing including a hybrid approach is implemented to categorize the sentiments for better accuracy while a word cloud is used for visualizing the sentiments. The sentiment analysis is conducted using hybrid approach, a combination of machine learning approach and lexicon based approach with the addition of dictionary based approach and Naïve Bayes as trained classifier. The system managed to successfully classify and visualize the sentiments using word cloud. Future research towards the system can be done by expanding the emotion database using formally language.

Keywords: *Facebook, word cloud, visualization, sentiment classification, emotion.*

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