TELKOM UNIVERSITY

Abstract

School of Computing The Graduate School

Master of Engineering

A Game With Purpose to Filter Spams from Indonesian Twitter Trending Topics

by Rian Hardinata

Spam is described with many descriptions, however it is generally recognised as unwanted messages it is also a part of AI complete problem. Started from e-mail era, now the problem leap forward to social media. Spam in social media is used for many malicious activity such as identity theft, malware distribution and pornographic contents spreading. Despite several researches about spam in Twitter, there is still some undetected spam in Twitter which implies that spam filter that is used by twitter nowadays lacks in precision. . Method that was used in this research are Game With a Purpose which used data from people who playing games to train Naive Bayes to detect spam, we use this method because it has been succeeded in another subset of AI complete problem before. By checking relationship between a tweet and its hashtag in trending topic, we could form a spam filter.

We find that in total our spam filter that is created from this method was having very high precision which is 98% for the same hashtag. For different hashtag, the precision is 75%. We also found that during the research, most of the time the player mostly being idle, but they play the game in burst. Therefore, we could conclude that Spam filter that is created with GWAP could detect spam in Twitter trending topic with overall good performance.