

Abstract

Social media has been evolved into an information source and communication media that could form a social network, for example is Twitter. Relations and interactions that happen in a social media can be represented in a graph that has node and edge. Interactions that exist in that network can form an explicit community unconsciously. The process of detecting that kind of community is using a clustering technique with agglomerative hierarchical clustering method in a botom-up fashion. The grouping process is done based on the similarity of inter-node were calculated using Random Walk method. The quality of resulting community structure is measured with modularity calculation to determine how good the division of communities. From the result of test that performed, Random Walk method and Agglomerative Hiererchical Clustering can be used to detecting community which yield value of modularity that reach 0,7.

Keywords: *Community detection, Agglomerative Hierarchical Clustering, Random Walk, modularity, Twitter.*