

Understanding the Selectional Preferences of the Twitter Mentions Network

Authors : R. Sudhesh Solomon, P. Y. K. L. Srinivas, Abhay Narayan, Amitava Das

Abstract : Users in social networks either unicast or broadcast their messages. At mention is the popular way of unicasting for Twitter whereas general tweeting could be considered as broadcasting method. Understanding the information flow and dynamics within a Social Network and modeling the same is a promising and an open research area called Information Diffusion. This paper seeks an answer to a fundamental question - understanding if the at-mention network or the unicasting pattern in social media is purely random in nature or is there any user specific selectional preference? To answer the question we present an empirical analysis to understand the sociological aspects of Twitter mentions network within a social network community. To understand the sociological behavior we analyze the values (Schwartz model: Achievement, Benevolence, Conformity, Hedonism, Power, Security, Self-Direction, Stimulation, Traditional and Universalism) of all the users. Empirical results suggest that values traits are indeed salient cue to understand how the mention-based communication network functions. For example, we notice that individuals possessing similar values unicast among themselves more often than with other value type people. We also observe that traditional and self-directed people do not maintain very close relationship in the network with the people of different values traits.

Keywords : information diffusion, personality and values, social network analysis, twitter mentions network

Conference Title : ICWSM 2018 : International Conference on Weblogs and Social Media

Conference Location : Paris, France

Conference Dates : August 27-28, 2018