

Analysis of Public Perception of Multiple Community Issues through Social Media Mining during a Pandemic

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ABSTRACT

The COVID-19 pandemic affected almost every aspect of our lives. It rapidly changed the way we behave in our daily lives, including how we seek and access information. Social media has become pivotal for accessing information about the pandemic, though not all information available is reliable. Therefore, this study uses a social media mining approach to analyze the public's sentiment during COVID-19 pandemic through social media posts (e.g. Twitter). Social media mining is crucial for understanding information behavior of individuals in a time when collective action is essential. Data is being collected through tweets streaming using terms related to coronavirus ("coronavirus" and "covid19"), and limited to tweets within the USA. Additionally, analysis on the aggregated tweets to understand emotional content of tweets was conducted alongside visual content (memes) related to the pandemic, which were collected for content analysis. Text mining and sentiment analysis serve as an avenue for understanding implicit meaning in social media posts, thus furthering a more complete understanding of messages transmitted via social media related to COVID-19. The analysis will be correlated with other aspects, such as timeline and pertinent activities. Understanding the process for collecting social media data during a world crisis (pandemic), creates a context where social media data can be analyzed through different perspectives, thus leading to a more in-depth understanding of efforts at communication about COVID-19 (education strategies, preventive behaviors, etc.), and the public's response to the crisis.

ALISE RESEARCH TAXONOMY TOPICS

social media; data mining; big data; natural language processing; data visualization

AUTHOR KEYWORDS

social media mining; public preference; pandemic; text mining; sentiment analysis