

Social media sentiment analysis and opinion mining in public security: Taxonomy, trend analysis, issues and future directions

ABSTRACT

The interest in social media sentiment analysis and opinion mining for public security events has increased over the years. The availability of social media platforms for communication provides a valuable source of information for sentiment analysis and opinion mining research. The content shared across the media gives potential input to the physical environment and social phenomena related to public security threats. The input has been used to: monitor public security threats or emergency events, analyzing sentiment and opinionated data for threat management and the detection of public security threat events using geographic location-based sentiment analysis. However, a systematic survey that describes the trends and latest developments in this domain is unavailable. This paper presents a survey of social media sentiment analysis and opinion mining for public security. This paper aims to: understand the progress of the current state-of-the-art, identify the research gaps, and propose potential future directions. In total, 200 articles published from 2016 to 2023 were considered in this survey. The taxonomy shows the key attributes and limitations of the work presented in the surveyed articles. Subsequently, the potential future direction of work on sentiment analysis in the public security domain is suggested for interested researchers.