


Chapter 93

Sentiment Analysis of Tweets on the COVID-19 Pandemic Using Machine Learning Techniques

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ABSTRACT

Sentiment evaluation alludes to separate the sentiments from the characteristic language and to perceive the mentality about the exact theme. Novel corona infection, a harmful malady ailment, is spreading out of the blue through the quarter, which thought processes respiratory tract diseases that can change from gentle to extraordinary levels. Because of its quick nature of spreading and no conceived cure, it ushered in a vibe of stress and pressure. In this chapter, a framework perusing principally based procedure is utilized to discover the musings of the tweets related to COVID and its effect lockdown. The chapter examines the tweets identified with the hash tags of crown infection and lockdown. The tweets were marked fabulous, negative, or fair, and a posting of classifiers has been utilized to investigate the precision and execution. The classifiers utilized have been under the four models which incorporate decision tree, regression, helpful asset vector framework, and naïve Bayes forms.

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1. INTRODUCTION

Open thought, emotions and their readiness for the crisis conditions like pandemic is ordinarily forewarned by method of aptitude of the print media, television, net posts, exchange sheets, interpersonal interaction destinations, thus forth Richardson, P et al (2020). Public wellness observing comprises of the wellness observation, following wellbeing dangers, occasional plague flare-ups and various crises consequently to restrict the risk of the famous open wellness. Generally wellbeing related overviews have been taken to secure sentiments of individuals on a wellness crisis. Celikyilmaz, A. (2010) The advancement of web and online life is an amazing flexibly for the wellbeing related information and cure data of the customary open which come to be named as 'Infodemiology'. Ji, X., Chun, S. A., et al (2016) Twitter, a smaller scale running a blog web page allows in customers to extent their considerations and feelings in a type of a message viewed as tweets, Liang, P. W., & Dai, B. R. (2013). The customers in this internet-based life webpage keeps up on developing and as of now the total vivacious clients are just about 330 million. Khatua, A., & Khatua, A. (2016) With this large assortment of clients, twitter has end up being a main gracefully for creating measurements which whenever examined, bears valuable bits of knowledge. Slant correlation and sentiment mining on twitter realities has risen path back in the beforehand years twitter. Piryani, R., et al (2017) A destructive malady is a sickness which spreads during the nations and affect a gigantic populace. Infirmity observation and early discovery may likewise be one of the significant bundles of e-wellbeing realities Li, L., Jin, X., et al (2012). Internet based life comprehensive of twitter can give crucial data comprising of open conversations on a topic alongside medical problems with longitudinal records which prompts expectation of flare-ups of scourges. Alessa, A., & Faezipour, M. (2018) Social media customers are sharing their wellness records and their assumptions that may need to effectively go about as a machine for separating the general popular feeling on pandemic. Russell, C. D., et al (2020) the natural open gratefulness at the hour of pandemic flare-up is generally alluded to in the twitter and tweets goes about as an unmistakable flexibly of records in perusing the notion of the clients. Girotra, M., et al (2013) Twitter goes about as a viable device to get right of passage to open practices over pandemics, surveying the degrees of pandemic, content material exchange on infection episode issue reconnaissance and notion assessment/sentiment mining. Afrati, F. et al (2004) Corona Virus infirmity (COVID-19) is an irresistible medical issue realized by method of a recently discovered Corona infection. The flare-up spreads so quick from the tainted character to the diverse by method of bead sullyng, surface contacts and has made a frenzy and crisis in numerous universal areas globally Blendon, R. J., et al (2003). Type procedures in data mining such Naïve Bayes, decision tree as are utilized to unharness the feelings of the clients as a segment of pandemic episode Taboada, M., et al (2011).

The Pediatric and geriatric immunity network mobile computational model for COVID-19 was proposed by the authors Mei, Q., et al (2007). The objective of the proposed methodology uses IoT devices for preventing the COVID-19. The IoT devices and sensors were used for data collection from the remote places Thelwall, M. (2010). The collected data was used by the machine learning algorithms to analyze and predict the chance of COVID-19 and prevention measures can be followed Priya, K. B., et al (2020).

The concept of Monitoring and sensing COVID-19 symptoms as a precaution using electronic wearable devices was proposed. The objective of this work is to observe and sense the different types of COVID-19 symptoms. This research has explained the different stages of COVID-19 along with the symptoms and the various mechanisms to observe the progress of this disease by many parameters. Risk aspects of the disease are sensibly analysed and equated with test results Josephine, M. S., (2020).

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