Opinion Mining to Extract Community Emotions on Covid-19 Immunization Possible Side Effects

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Abstract : The world witnessed a fierce attack from the Covid-19 virus, which affected public life socially, economically, healthily and psychologically. The world's governments tried to confront the pandemic by imposing a number of precautionary measures such as general closure, curfews and social distancing. Scientists have also made strenuous efforts to develop an effective vaccine to train the immune system to develop antibodies to combat the virus, thus reducing its symptoms and limiting its spread. Artificial intelligence, along with researchers and medical authorities, has accelerated the vaccine development process through big data processing and simulation. On the other hand, one of the most important negatives of the impact of Covid 19 was the state of anxiety and fear due to the blowout of rumors through social media, which prompted governments to try to reassure the public with the available means. This study aims to proposed using Sentiment Analysis (AKA Opinion Mining) and deep learning as efficient artificial intelligence techniques to work on retrieving the tweets of the public from Twitter and then analyze it automatically to extract their opinions, expression and feelings, negatively or positively, about the symptoms they may feel after vaccination. Sentiment analysis is characterized by its ability to access what the public post in social media within a record time and at a lower cost than traditional means such as questionnaires and interviews, not to mention the accuracy of the information as it comes from what the public expresses voluntarily.

Keywords : deep learning, opinion mining, natural language processing, sentiment analysis

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