

Deep learning techniques to diagnose COVID-19 big data based on features extracted from CT and x-ray images

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This study aimed at testing the role of Deep learning techniques on predicting COVID-19 big data. The study adopted two tasks to measure Deep learning (classification, clustering), while the big data was measured through three dimensions: volume, variety and velocity. To achieve study aims, the researcher relied on measuring accuracy and parameters settings of classification and clustering techniques, and measuring the features of the covid-19 dataset. First, by presenting questions that reflects the dimensionality of the dataset and the features of the two techniques. Second, by analyzing the outcomes of the artificial neural network and K-means to answer those questions. Also, the results of both techniques, artificial neural network and K-means, proved to be suitable to classify instances into two categories of negative and positive covid-19 cases and some features of both techniques are of no significant impact on accuracy, and the classification has a greatest impact on accuracy contributed to a number of features.

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