ABSTRACT

CLASSIFICATION OF DRUGS FOR PEOPLE WITH MENTAL DISORDER USING THE 1D – CONVNET MODEL

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Generally, psychosis patients will be prescribed drugs by doctors to help control emotional and mood changes. Drugs given to people with mental disorders fall into several categories, but the drug groups that had the most significant differences were the SSRI and Atypical groups. If the patient takes the drug in excess and does not comply with the doctor's recommendations, side effects will arise which are quite dangerous both in the short and long term. Therefore, people with mental disorders need to know which category the drugs they are taking so that they can minimize the side effects of the drugs. These problems can be overcome by collaborating on the science of pharmacology and artificial intelligence using the deep learning technique of the 1D-Convnet model. The 1D-Convnet model is believed to have a high level of accuracy, especially for one-dimensional data classification. The stages carried out start from dataset preparation, exploratory data, dataset preprocessing, training models, accuracy, and classification. The accuracy of the calculation results reaches 100%, which means that the model can be said to be good and can be used for classification. The accuracy results are affected by the number of parameters during the 1D-Convnet model development, epoch and batch size during model training. To prove the level of accuracy, this study classifies test data and new data. The results of the classification obtain appropriate predictions so that this study has succeeded in classifying data in the form of text using the 1D-Convnet model.

Keyword : 1D-Convnet, Accuracy, Classification, Model, Drugs