

ABSTRACT

The lungs are the respiratory tract for humans to breathe by inhaling oxygen (O₂) and exhaling carbon dioxide (CO₂) and water vapor (H₂O). Prevention and early detection of lung disorders is usually carried out by a doctor. The expertise possessed allows doctors to diagnose whether a person's lungs are normal or there is a disorder (abnormal). The detection of lung disorders (abnormal), which is usually used by doctors, is by listening to the sounds of the lungs using a stethoscope or commonly referred to as the auscultation technique. In this study, updating of lung sound data was made in 2-dimensional data spectrograms. A good classification algorithm for handling 2-dimensional data is Convolutional Neural Network (CNN). So that the research on lung sound data is carried out in the form of a lung sound spectrogram which will be processed with the CNN classification. The accuracy results obtained were 74% of the total research conducted.

Keywords: Lung sound, Preprocessing, Klasifikasi, CNN, Spectrogram