

## **ABSTRAK**

Lung sounds refer to the specific sounds produced by the movement of air through the respiratory system. There are two types of lung sounds, namely normal and abnormal. Examples of abnormal lung sounds are crackles, wheezes. Crackles are the sound of the lungs crackling or bubbling that originates from the base of the lungs, as a result of delays in reopening the closed airway. Wheezes are whistling sounds caused by air passing through the airway that is partially closed. In this study, the authors built a classification model for abnormal wheezes, crackles and normal lung sounds using the wavelet haar and wavelet daubechies 3 methods to extract feature vectors and using the Gate Recurrent Unit (GRU) algorithm to classify lung sounds. In the classification process with the GRU model several test scenarios are added to analyze the accuracy results obtained. The highest accuracy results were obtained in the wavelet testing scenario Daubechies 3, Adam's optimizer and the dropout value of 0,6 got an accuracy value of 88,81%.