

= 1, so the signal change was too insignificant, making GLDM results slightly small.

The accuracy results in this study were still lower than in previous studies using gamma waves [12]. However, the proposed method still leaves much potential for development. Image conversion results in this study have not been through improved image quality, such as increased contrast. Another thing that can be done is calculating GLDM at various distances, as in [22]. The modified GLDM was measured at multiple distances before calculating the feature in the form of the Hjorth descriptor. In this study, the selection of relevant characteristics can still be made using various existing methods. The combined exploration of multiple methods to improve the performance of the proposed system became an exciting topic in the future.

IV. CONCLUSION

This research describes the performance of the Alcoholic EEG system for categorization by converting a 64-channel EEG signal into a grayscale image. GLDM was used to extract features at a distance of $d = 1$. In this work, picture analysis was carried out directly, without the need for earlier image processing. The result was a low-contrast image after conversion. Converting multiple channels of signals to an image has advantages, such as image processing methods that can provide many alternative feature extraction and other signal processing techniques. Thus, there will be many alternative ways to improve accuracy besides using machine learning for classifiers. Exploration that can be done in future studies includes channel selection, image enhancement methods, or other feature extraction methods.

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