

ABSTRAK

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Deteksi *Down Syndrome* Pada Anak Menggunakan *Convolutional Neural Networks* (CNN)

Keywords : Detection, *Down Syndrome*, CNN

This research aims to provide an early detection method to help provide more effective medical intervention, treatment and support to improve children's quality of life and help families affected by Down Syndrome. This research can develop better and more efficient early detection technology for health conditions and increase understanding of Down Syndrome as well as awareness of public health conditions, especially in children. This research uses data collection methods, data preprocessing, data sharing, CNN architecture creation, CNN training, evaluation and tuning, as well as testing and analysis. The results of the research carried out obtained an accuracy of 80.44% with a training rate of 100 epochs, while for other classification measures such as AUC, Precision, and Recall it was 91.41%, 83.28%, 83.94%. The convolutional neural networks (CNN) method can help early detection of children with Down Syndrome with classification accuracy of 80.44%.