Media Pembelajaran Pengenalan Hewan Pada Anak Usia Dini Menggunakan

Metode Convolutional Neuro Network (Animal Recognition Learning Media

for Early Childhood Using Convolutional Neural Networks)

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ABSTRACT

This study developed an interactive learning media for animal recognition aimed at

early childhood education using the Convolutional Neural Network (CNN) method.

The CNN model was built using the DenseNet121 architecture, achieving a high

accuracy of 97%. Evaluation through the confusion matrix and classification report

showed that most animal classes achieved precision, recall, and F1-scores close to

1.00. Expert validation involving six teachers from TKIT-TBIT Permata Leces

confirmed that the application aligns with the early childhood education curriculum

and is suitable for classroom use. Furthermore, User Acceptance Testing (UAT)

conducted with 20 children revealed very high user satisfaction. Most children

enjoyed using the app, liked the animal images and voice explanations, and

expressed interest in using it again. These results demonstrate that the application

is effective, user-friendly, and well-suited as an interactive educational tool for

introducing animals to young children.

Keywords: CNN, Recognition of Animals, instructional Media

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