Transfer Learning pada Estimasi Pose Hewan Menggunakan YoloV8 dan Fine-Tuning

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Abstract

Advances in image processing technology and artificial intelligence have opened up new opportunities in image analysis, especially in the context of animal pose estimation. This research aims to combine the advantages of YOLOV8 in object detection with accurate animal pose estimation through a transfer learning approach. By finetuning YOLOV8 using a special dataset for animal pose estimation, this research seeks to improve the model's ability to recognize and determine the position of various animal body parts more precisely. The success of this research is expected to contribute to the development of animal pose estimation, opening up opportunities in animal health management, animal behavior studies, and other applications that require complex image analysis. However, this study has limitations, including an exclusive focus on estimating animal poses through transfer learning and fine-tuning techniques, without considering other variables such as lighting and shooting angles, and using a limited dataset from the Stanford Dog Dataset.

Keywords: Stanford Dog Dataset, YOLOV8, fine-tuning, transfer learning.

