

AI Fitness Model using Deep Learning

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Abstract: The project “AI Fitness Model Using Deep Learning (YOLOv5)” aims in order to transform the fitness business by leveraging state-of-the-art deep learning techniques, specifically YOLOv5 (You Only Look Once version 5), to develop an advanced and efficient fitness tracking system. The model is designed to accurately detect and analyze human poses, movements, and exercise routines in real-time using computer vision. By employing YOLOv5’s object detection capabilities, the AI fitness model can identify key body points, track exercise execution, and provide personalized feedback to users, enhancing their workout experience. This creative strategy not only facilitates automated performance monitoring but also enables the creation of adaptive and dynamic fitness routines tailored to individual needs, fostering improved engagement and results in the realm of health and wellness

Keywords: YOLOv5, Precision, Recall, F1 score

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