

REAL TIME WORKOUT RE-CORRECTION USING POSE ESTIMATION

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Abstract

Doing workouts in the perfect pose is the one of the problems people face. Without a workout assistant doing workouts in perfect pose without getting any pose alignment errors is very hard for people. There are many workout helping mobile applications but none of them detects incorrect poses in real-time. There are some systems detects poses and recorrects them but they require pre recorded videos of the user in order to process the postures and detect the pose erros.

The proposed solution will provide a system that will detect the human pose and recognice the range of the correct posture and provide the validity of the workout pose in real-time using human pose estimation. the system will ditect the human pose in real-time using a pre trained pose estimation model. Using the model the system will validate the range of the correct pose and it will display the user if the pose is correct or incorrect in real-time

Testing was carried out on both functional and non-functional requirements, with satisfactory level results. Domain experts, software engineers, and common end-users all contributed to the evaluation. The evaluation results assisted in identifying the project's strengths and weaknesses, as well as future improvements that are required.