Live Yoga Pose Classification using Image Processing and Machine Learning

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Abstract: *An approach to accurately recognize various Yoga Pose Assessment using deep learning algorithms has been presented in this work. In this system, we propose a Yoga pose assessment method using pose detection to help the self-learning of Yoga. The system first detects a yoga pose using multi parts detection only with PC camera. In this system, we also propose an improved algorithm to calculate scores that can be applied to all poses. Our application is evaluated on different Yoga poses under different scenes, and its robustness is also. A hybrid Machine learning model is proposed using linear Regression for Yoga recognition on real-time videos, where Linear regression is used to extract features from key-points of each frame obtained from Open Pose.*

Keywords: Linear Regression algorithm, Machine Learning, Image pre-processing, pose Detection

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