Yoga Posture Detection and Correction System

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Abstract: *In past years, Humans are troubled to a wide range of health issues. To recover from this type of issues, yoga has become an important part of life for many people. Yoga can help you improve your body for the better. There are many benefits of yoga, but doing so incorrectly can lead to a dangerous lifestyle. So proper instruction is required. Due to this there is the need of scientific analysis of y postures. With proper instructions, a person can reach several benefits from activities while also improving his or her health. Yoga is very popular around the world. Yoga is focusing at development of personality, spirit and the body. There are many ways from which a person can learn a yoga. It can be learnt by attending yoga classes, also with help of videos and images. Most of the people try self-learning by saving their money, but it is hard to find them incorrect part of their yoga poses. With help of this system, the user is under real time supervision. User's pose is compared with the pose in the pre-trained dataset and the difference is calculated between angles of body joints. As a result, Yoga pose is correctly detected and according to the difference in angles the feedback will be provided to the user for improving the pose and doing it correctly. Dataset used for training and testing purpose. This dataset is tested on different Machine learning classification models and achieves an accuracy of 99%.*

Keywords: Yoga pose recognition, Machine Learning, Classification, Collection of dataset

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