Deep Learning Approach for Yoga Posture Evaluation

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Abstract: *In the present generation due to the mechanical lifestyle of people, everyone is facing several health issues. To balance the lifestyle, one needs to inculcate habits that improve health. Adopting yoga as a habit can be incredibly beneficial. Holding certain yoga positions that require supporting one's body weight can be challenging and strengthen specific muscles. Yoga consists of various components that can enhance flexibility, strength, balance, and stability.*

Our application is evaluated on different Yoga poses under different scenes. It has been observed that pose detection techniques can be used to identify the postures and to assist people to perform yoga more accurately, for the accurate detection of yoga pose different feature extraction and pre-processing methods are applied to the dataset just by using machine learning algorithms. In this work, a website can be created to link yoga poses with their corresponding asanas and upon correct execution that pose time will be calculated and report will be generated to view pose time he/she performed yoga as an correctly.

Keywords: CNN, Machine learning, Deep learning, Movenet thunder , Artificial intelligence

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