Yoga Posture Analysis using Deep Learning

Geetika Munjal, Anshumaan Garg, Sagar Wadhwa*

Department of Computer Science and Engineering, Amity University Noida, Amity Rd, Sector 125, Noida, Uttar Pradesh-201301, India

*Corresponding author's e-mail: sagarwadhwa888@gmail.com

ABSTRACT

In a society where the pursuit of happiness is crucial, the project "Yoga Posture Analysis Utilizing Deep Learning" emerges as a groundbreaking solution that fuses ancient wisdom with innovative technology. This concept revolves around a user-friendly website that acts as a personal Yoga mentor for everyone, irrespective of financial resources. The project's significance lies in its meticulous examination of Yoga postures through potent deep learning methods, particularly convolutional neural networks (CNNs). Envision engaging in Yoga at home while receiving prompt, accurate feedback on your poses - that is precisely what our project accomplishes. The technology assists practitioners by offering personalized recommendations to enhance their stances in real-time. The website encompasses a vast array of Yoga positions, each accompanied by comprehensive instructions. However, this initiative transcends mere technology; it embodies inclusivity and empowerment. Yoga instruction becomes more widely accessible by eliminating financial constraints. It ensures that the transformative benefits of Yoga are not confined by one's financial or geographical circumstances. Moreover, it prioritizes user safety by advising them to maintain proper postures, thereby mitigating the risk of injury associated with improper practices. "Yoga Posture Analysis Utilizing Deep Learning" transcends being a virtual platform; it serves as a gateway to a healthier, more interconnected world. It embodies the essence of well-being, inviting individuals from all occupations to partake in the ancient practice of Yoga confidently and effortlessly. Yoga's timeless wisdom serves as a guiding beacon in this endeavour, illuminating the path to holistic health.

Keywords: Pose Detection; Preprocessing; Deep Learning

How to Cite

G. Munjal, A. Garg, S. Wadhwa, "Yoga Posture Analysis using Deep Learning", *AIJR Abstracts*, pp. 28–28, Feb. 2024.

