Abstract
This paper covers the aspects of action recognition using Kinect technology by human skeletal tracking. Microsoft Kinect is one of the latest advancements in Computer Vision based HCI (Human Computer Interaction). The paper is focused on how the Kinect sensor captures the 3D information of a scene and recognizes the action being performed by the human body by retrieving the depth image information and real-time skeletal tracking. The Kinect technology has revolutionized the way humans interact with the machines. It has a wide range of applications areas. The paper also covers one of the proposed approach to skeletal based action recognition using Kinect.

References

- Z. Ren, J. Yuan, and Z. Zhang, &apos;&apos;Robust Hand Gesture Recognition Based on Finger-Earth Movers Distance with a Commodity Depth Camera," &apos;&apos;Proc. 19th ACM Int&apos;&apos; Conf. Multimedia (ACM MM), ACM Press, 2011, pp. 10931096.

**Index Terms**

Computer Science  
Pattern Recognition

**Keywords**

Microsoft Kinect Sensor  
Action Recognition  
Skeletal Tracking  
Hmm  
Pose Estimation