Recognizing ongoing human actions based on a 3D reconstruction of the human’s skeleton

# Abstract

This paper presents an effective approach for recognizing human actions in real-time based on a 3D reconstruction of the human’s skeleton. The proposed approach uses multidimensional statistical algorithms, filtering algorithms and many others. The skeleton data is given by a Kinect sensor. In progress is comparison between our approach and the traditional HMM’s and Neural networks as well as other algorithms, that are not so widely or never used. By small modification of the proposed approach, it can be used to recognize various other activities (e.g. biological cell, medical observations and others).