Human motion recognition based on Kinect sensor and leap motion controller

ABSTRACT

Augmented reality (AR) is an interactive experience of a real-world environment where objects reside in the real world are enhanced by computer-generated perceptual information. In essence, emulating and altering reality that include, in relatively real-time and precision, position and motion tracking (sensors like Kinect and Leap Motion Controller), match moving (techniques allowing insertion of computer graphics into live-action footage with correct position, scale, orientation and motion), and finally motion capturing (process of recording movements of objects or people). This review is dedicated to the question of what object recognition (motion tracking, match moving and motion capture) is and how this technique can be identified, thus synthesizing knowledge in the field. The former is further clarified, elaborated, and compared using input sensors like Kinect and Leap Motion Controller.