Implementation of Augmented Reality and Virtual Reality in Different Fields

Abstract:

In the era Twenty First century, Artificial Intelligence (AI) have established as a well-known technology being the baseline of every commercial industry with tremendous amount of power the data holds within. And it can be noticed by exponentially increasing market of AI based and AI powered applications, for example, Augmented Reality(AR) and Virtual Reality(VR) are constantly changing the perspective and way of the world that we can experience while sitting at home. A very powerful domain in the field of Artificial Intelligence is Computer Vision (CV), which helps the AI boosted applications to achieve a next level experience allowing them to make inference like human eyes. Computer Vision has been widely used in various areas including medical, security monitoring, transportation, industrial production, Internet, games, military and other fields. In the area of Augmented Reality, in order to improve efficiency we need our applications to be smart enough to understand various types of information and critically the visual information, among which computer vision technology plays an important role. We have managed to pass this gift to the computers to a great extent. Still computer vision is not like human vision, the images need to go through a lots of seriously complex mathematical as well as logical operations in order to process a result based on it. After the efforts of great minds over almost half a century, computer vision has been in image recognition, classification, detection and segmentation, search, synthetic made great achievements. This paper discusses the areas where Augmented Reality(AR) and Virtual Reality(VR) could be introduced to replace the traditional old-fashioned ways in order to yield efficient and effective results.

Keywords:

- [1] Artificial Intelligence
- [2] Computer Vision
- [3] Augmented Reality
- [4] Virtual Reality