Topic Assignment AR/VR

During the lecture several applications of virtual and augmented reality were shown. Select 3 application areas from the list below and think of a VR or AR concept for each application area. Describe (75 to 150 words) for each concept specifically what you want to achieve with it and how it works. For each concept, create at least one illustration / photo / image that supports the concept.

1. Healthcare

A way that Virtual Reality could be implemented in healthcare, is via a "virtual tour of the human body" through a surgery simulator. For instance, surgical interns could "practice" surgery on a patient through virtual reality. This way, they will get acquainted with the tools necessary for such a surgery, they could practice where to make the incision, and the things they need to be extra careful around. This might give them the confidence and knowledge (next to medical school of course) to start performing surgery. Practicing on cadavers is very useful as well, but knowing the person has already passed takes away the



real feeling. In this VR program, you could see all the patients vitals, and if you do something wrong, you can instantly tell, whereas minor mistakes might be overlooked when practicing on a corpse.

2. Public transport

How often has it happened that someone missed their stop on the bus? It might be that they usually never travel with public transport, or that they are in a new country/city. Augmented Reality could be very useful in this situation. Imagine if the windows of the bus displayed what you would normally see out of the window, but also showed the exact route the bus is going to take. For instance with a dotted line running through the city. This way you would be prepared when your stop came, and never miss it again!



3. Cars



A lot of people are anxious to start taking driving lessons because they think they are not up for the task. A virtual car ride with them at the wheel could be of much help here. This way, they can get to know the care, traffic, traffic signs, etc. This might prepare them for taking driving lessons in the real world.

Research. Look for fun / interesting / impressive projects. Try to find background information about the project, only a YouTube video is not enough. Describe (75 to 150 words) what the project entails and what you like / find interesting / impressive about it. Also mention the name(s) of the creator(s) and provide a link.

Hypersuit

The hyper suit is a full body apparatus that, in combination with a pair of VR-goggles, gives you the sensation that you are flying. This is extremely cool to me, because who hasn't dreamt about being able to fly? Since humans will not achieve this anytime soon, it is very interesting that this can be simulated through VR. The video shows a futuristic-looking apparatus which gives you the ability to freely move your limbs, which adds to the experience. I did expect to see something more hi-fi then the game shown, but I am sure this could lead to greater things.

Source: https://www.trendhunter.com/trends/hypersuit