Augmented Reality in Gaming

For decades, the ultimate goal for programmers and engineers was to bridge the gap between the digital world and the real world. Starting with pong, the first mainstream video game, programmers have been working to make the digital experience as real and natural as possible. Thanks to the emergence of technologies such as GPS the reality that we know now is only the building block for a plethora of possibilities.

Augmented reality is simply a supplemented reality. This is essentially a way of combining the real and digital in a way that is either helpful or entertaining. By doing this in real-time along with high resolution, the user gets the feeling that whatever he/she is experience must be real. This makes it easier for the user to work with and complete his/her task.

Augmented reality is still a very young idea. The first augmented reality system was developed in 1992 by an inventor names Louis B. Rosenberg. Rosenberg’s idea, “Virtual fixture”, was designed so that a second robot would mimic the tasks that the user was performing in their exoskeleton-like fixture. To make it more interesting, Rosenberg programmed the system to generate virtual barriers to guide and assist the user. Rosenberg was the first to show that one can increase human performance by providing assistance through an augmented reality.

What was once just a far-fetched idea, the ability to supplement and create a new reality in real-time is upon us. All one has to do now is download an app and in a minute they can be searching light-years and light-years into the night-sky. The best thing about that is the fact that this is just the beginning. There are so many applications for augmented reality systems it is astounding. The gaming community is now starting to use a lot of this kind of technology to enhance the users gaming experience.
Microsoft has already developed a system called “HoloLens” that allows the user to play with computer-generated holograms as if they were physical objects. This works by scanning the surrounding objects so that one’s “playing field” depends on their environment. Also “HoloLens” can scan anywhere from 3 to 64 square meters which is pretty remarkable. One thing that is better about AR rather than VR is the fact that the user can experience both the real world and the program at the same time. This drastically reduces the possibility for getting nausea or motion sickness. At the same time this increases the system’s usability and comfort which is what really sells to the consumer.

Just like we talked about in the Analog v. Digital lecture, the trick to augmented/virtual reality is getting the sweet spot between potato quality and the uncanny valley where the digital reality is “too perfect” to be real. Between that and getting the whole program to work in real-time, it makes sense why it has been taking so long to get augmented reality machines into the common home. Thankfully we are getting closer and closer to that point each day.
Works Cited
