Analysing Immersion, Presence, and Interaction and its effects in Augmented Reality (AR) Mobile Games

Name: Bebito Samji

Supervisor: Dr. Mads Haahr

Year: 2018

Title of Degree: Master of Science Interactive Digital Media

Abstract

The first generations of computer games, like Spacewar! developed in 1962, did not have sufficient computational resources to implement realistic visualisations of the real world. With the advent of three-dimensional graphics in the 1970s, it became much easier to translate the real world into its corresponding virtual world. The evolution of computer hardware, thus more processing power and memory, along with the increased capabilities of design software has enabled us to create characters that look more realistic. Digital games have become a very distinct type of immersive media. The incorporation of fantasy and story have proved to be effective in creating strong immersive and interactive media across different platforms. It has been found that audio-visual and narrative features can also lead to immersion. Modern games are designed to be more engaging than ever considering the use of affordable Virtual Reality (VR) and Augmented Reality (AR) hardware. The smartphone industry has also harnessed the possibilities of AR and VR for developing games.

One of the objectives of the paper is to identify and define concepts like immersion, presence and interaction in digital games. The paper will also try to understand the relation between these concepts and how dependent they are on each other. Having defined these concepts, the main aim of the paper is to investigate the above-said concepts in Augmented Reality (AR) games for smartphones. The paper will evaluate how factors such as immersion, presence and interaction work together to create a good gaming experience while playing games on smartphones. The paper will also investigate how elements of the games like story, mechanics and aesthetics influence immersion, presence and interaction.

Keywords: Augmented Reality (AR), Virtual Reality (VR), Immersion, Presence, Interaction