# A Primary Study on the Design Immersive Campus

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## Abstract

This paper studies a user to access a lot of interactive sign of the virtual world by using a fixed-screen system and on the web site. The immersive campus views and platform motions make the user's senses like driving through a real campus. According to lot of simulation and examination to understand the influence of each senses for help to design an immersive effects with a virtual campus.

The section 1 of "Introduction" describes this paper how to design a virtual world with immersive effect. According to examination of this paper simulate, the senses of seeing, hearing, and feeling from driving a virtual world can combine a lots of basic immersive effects. The user can be seating in the front of a fixed-screen or monitor. It allows to using a set of applications like as drivers. The driver likes using whole-body navigate through an immersive campus. The campus also can be driving on the web and effectively doubling or tripling from access a lots interactive sign. The feature of this paper design those interactive sign based on lot recognition of examination. According to recognize, the finally goal of this immersive campus also can be access from the web.

The section 2 of "A Fixed-Screen System Generation" describes the Virtual Environment (VE). Fig.1 illustrates the construction of hardware. The VE of this paper included a fixed-screen system with display screen and "Motion platform". The VE also is driven by PCs (Personal Computers).

The section 3 of "The Immersive Design of Campus" describes how to an immersive design a real campus by using a lots interactive application arrange to "Visual sign", "Audio sound" and "Force feedback".Fig.2 visualizing the interactive objects gives the user a way to interpret the "Visual sign". Fig.3 shows user access a "Audio sound", the position and the direction of sound will be around whole campus and different from each Conner. Fig.4 shows user driven on the campus will be meet a lots of objects by within the "Force Feedback".

The section 4 of "Simulation and Results" describes the driver navigates through this simulation, the "Visual sign" can be lead the driver entry a virtual world. Driver can be go through or turn the direction of moving and toward back. On campus, driver also can be ringing a bell using a "Audio sound". In the middle of road, driver also can be feel meets lots of rocks from the "Force feedback" by using a "Motion platform".

The section 5 of “Examine and Distribution” describes lots of examinations permit the users to describe senses depending on more natural-seeming experiences. According to these examinations, this system can be recognized the immersive campus from navigating a virtual world.

The section 6 of “Conclusion and Future work” describes the most important challenging task is the way shows how to design a immersive virtual world generation by using a fixed-screen and access on the web. Also the performance of motion platform influence the user’s sense.

# Reference


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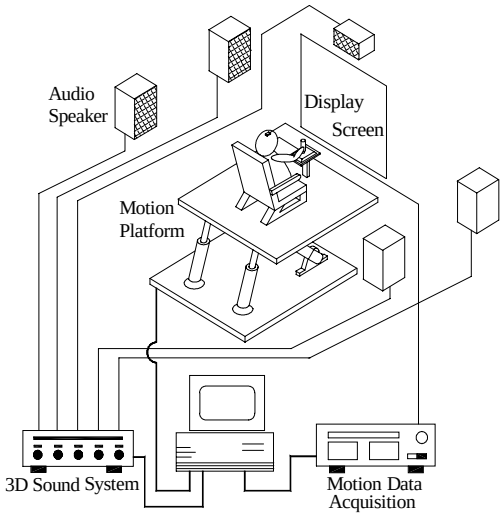


Fig.1 Motion Platform

Fig.2 Visual Sign

Fig.3 Audio Sound

Fig.4 Force Feedback