Related Former ETC Projects

Augmented Cognition (Spring 2004, advised by Jesse)

Summary

The purpose of the AugCog project is, first, to create a technology that will **enhance foot soldiers' experience in combat**. Working with DARPA, we are creating a **wireless virtual environment** that will **create stress and using biometric equipment**; we can process the data and develop applications that would **allow the soldier to be more effective in a high stress situation**. Second, we are doing other research and development on sensors and applications to learn more about the capabilities and possibilities in the field of biofeedback.

Highlights

This is what Jesse said "what we are doing" project, which he think is a failure. Let's try to figure out why they failed.

Website:

http://www.etc.cmu.edu/projects/biofeedback/

Night of the Living Dead (2006)

Overview

Survival is a "strategy horror" game. You take control of Ben, a capable, strong willed individual, who faced with the horror of the dead coming back to life, must organize and lead groups of characters to survive.

To hold off the undead tide, you must strategically allocate all your resources to provide the best defense. Should you have Barbara board the windows in the kitchen while you try to convince Cooper to help your cause?

Can you convince Judy to leave her brother's side and guard the kitchen? The threat of zombies is ever present and only through constant vigilance will you be prepared to hold them off and have any hope of surviving.

Highlights

This is a zombie game. Maybe we can learn something about zombie from their project.

Website:

http://www.etc.cmu.edu/projects/livingdead/

See-Saw

Problem Statement

Many critics of MMOs complain that MMOs put too much emphasis on Virtual Skills and require little real player skills, such as reaction or rhythm. At the same time, **many developers find it challenging to include player-skill based elements in their MMOs.** By including player-skill elements, they risk segregating players who feel they cannot compete fairly in games involving real player skills. For example, in a shooter game, a young player with better reflexes is generally thought to have an advantage over older players who might have poorer reflexes.

Goal

Project See-Saw is a research game project, aimed at **finding the best balancing technique to create a player-skill based multiplayer game**. A successful balance technique should help both very skilled and less skilled players find the right challenge and satisfaction in a cooperative multiplayer skill-based game.

Website

http://www.etc.cmu.edu/projects/skill/index.html

Motion Control Related projects

Table Topia

Introduction

TableTopia is a **wireless motion capture experience** that merges virtual and physical reality through the use of physical interactions.

Through a wireless headmounted display, guests see a living world built on a tabletop, filled with real objects that may be touched and manipulated directly, and with virtual characters that may be seen and heard but never felt.

By feeling the terrain built on a real, solid table and interacting with actual objects present in the world, guests benefit from the immersiveness of true haptics and the freedom of an animated environment.

Mo'Jox (Sprint 2006)

Objective

Mo'jox is a 14-week, student-led initiative to explore and develop new methods for interaction with **real-time optical motion capture**. Using a 12 camera optical motion capture system, wireless virtual reality and static haptics, we aim to create stimulating and entertaining new interfaces for work, play, and exploration.

Website:

http://www.etc.cmu.edu/projects/mojox/top.html

Master Motion

Overview

The Master Motion project is using an **optical motion capture system and wireless VR to explore how virtual reality can be used to learn physical movement**.

Website

http://www.etc.cmu.edu/projects/mastermotion/

Wizards & Lizards
Overview

The concept of Wizards&Lizards is the production of two small **real-time motion capture games** that employ virtual reality to immerse the guest in magical world. The style is a hybrid of medieval and fantasy lore. The back-story is that two rival clans of magic users: humans (Reapers) and lizards (Hssklk) are at battle over the enchanted mountain Akronchrusos (known to Hssklk as Stone Mother), where the lizards make their home and the battle takes place. Possible expansions to the setting include a network of caves, a magic carpet hangar, and the interior of the tower fortress. The theme is rivalry, unexpected adventure and coming-of-age, amidst arcane power. Each game playing session is expected to take from five to ten minutes.

http://www.etc.cmu.edu/projects/wizliz/intro.html