MEDIATED COMBAT PLAY

Keywords
whole-body interaction, distributed interaction

Input
players‘ position, impact of punches

Output:
projection

Technology:
camera, stretch sensors

MEDIATED COMBAT PLAY

Description:

Mediated Combat Play focuses on virtual body-to-body interactions between multiple participants, inspired by combat-oriented sports such as boxing that highlight the need to act while avoiding reciprocal bodily action. The designed game enables remote shadow boxing.

Two remote mounted mattresses equipped with stretching sensors measure the force and the position of the players‘ punches. A camera behind each player records his position. A projector augments a mattress with the shadows of both players according to their relative position to each other.

Links:
http://exertiongameslab.org/wp-content/uploads/2011/07/designing_mediated_combat_tei2013.pdf

CueLight

Keywords
augmented sport, digitally-enhanced pool

Input
position of pool balls

Output:
projection on pool table

Technology:
camera tracking, projector

CueLight

Description:

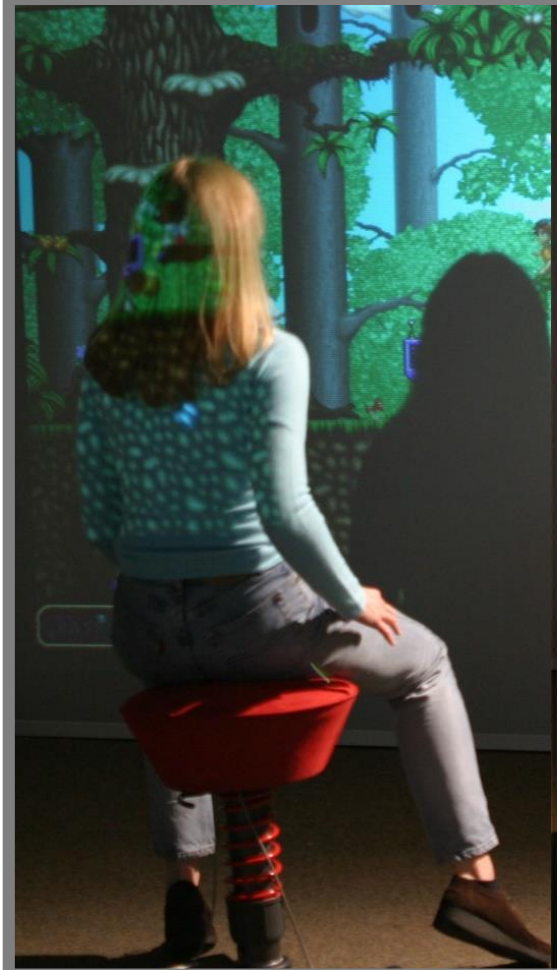
CueLight is a system that enhances any pool table into an interactive, digitally-enhanced video experience. Camera tracking is used to map the location of the cue balls, which is used to manipulate the visuals being projected on the table.

The table can resemble a pool of water with wakes being created by the moving cue balls, or the position of the balls can be used to uncover an image on the table. Future versions might also include a digital overlay that shows the perfect angle for the player's next move calculated by a computer.

CueLight was created by Obscura Digital in 2009 for the SOHO Esquire House in NYC but is now also located in the Hard Rock Casino in Las Vegas.

Links:
http://www.obscuradigital.com/work/detail/cuelight/

ChairIO



Keywords
interactive chair, input device

Input
players‘ position on a chair

Output:
viewpoint, movement in virtual environment

Technology:
chair equipped with sensors

ChairIO

Description:

ChairIO is an interface based on the commercially available seat, the Swopper. The seat is rotatable, can tilt in any direction, and the damper system allows the user to bounce. To operate the ChairIO, the user sits on the device, and by shifting his or her body weight, tilts it in any direction or rotates the seat. This physical movement of the seat is mapped to viewpoint and direction movement in a virtual environment.

The current method of determining the position and orientation of the seat uses two points on the seat determined by a magnetic tracker.

Links:
http://imve.informatik.uni-hamburg.de/projects/chairIO/
http://www.swopper.de/swopper/