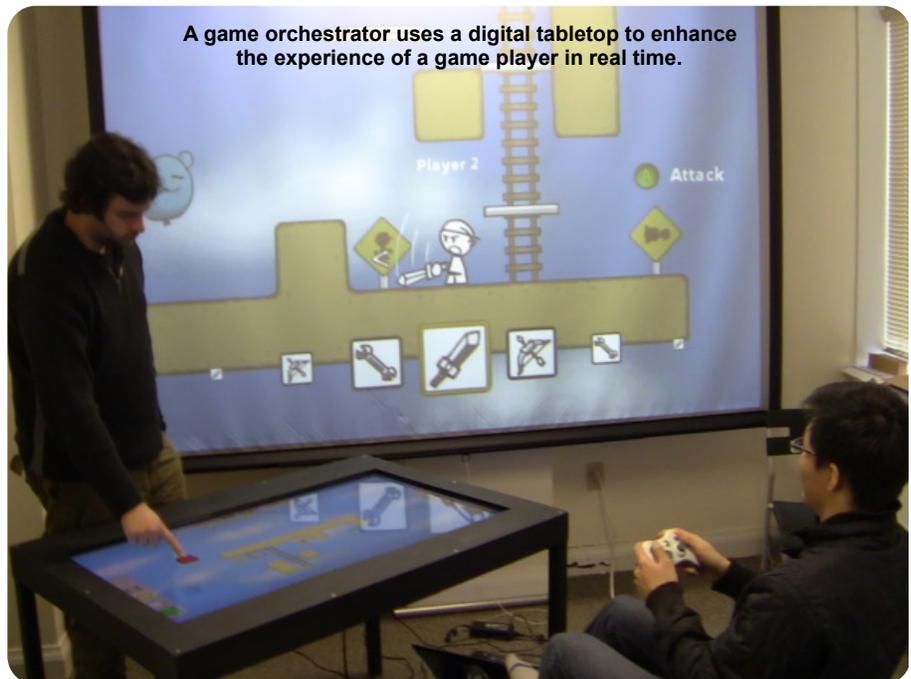


Game Orchestration with Liberi Live over Distributed Surfaces

By Nicholas Graham, Irina Schumann, Quentin Bellay and Zi Ye, Queen's University

Digital games allow players to enter a virtual world full of wonder and possibilities to explore. These possibilities are limited, however, by the game's code: it is simply not possible for players to extend the experience with actions that the designer has not anticipated. Game orchestration provides a different approach, where a game designer (or "orchestrator") takes part in the game, manipulating the players' experiences in real-time. The orchestrator can react to players' interests and can adjust the difficulty of the game, all as the game is playing.

To explore this new form of gameplay, we have created Liberi Live, a game orchestration client allowing high-intensity, real-time creation of game content. Orchestrators can create new terrain, add new entities to the game, and animate existing entities, all while people play the game. Liberi Live is implemented on a digital tabletop to allow fast, collaborative manipulation of



game experiences. The figure above shows one person orchestrating a game while another plays it. An orchestrator uses a paint-like interface to draw terrain and entities into the world, selecting from a palette. Small

groups of orchestrators can combine efforts to create content more rapidly. The tangible interaction with the world (literally like finger painting) is critical to rapid creation and manipulation of content.

In This Issue

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LEARNING, GAMING, NEW
MEDIA & DIGITAL HOMES

Digital surfaces create new
opportunities for learning & gaming

New industrial partners are
welcome!

Digital Tabletop Board Gaming

By Joey Pape, Nicholas Graham (Queen's University) and Jim Wallace, Betty Chang, Phil McClelland, Stacey Scott, Mark Hancock (University of Waterloo)

Digital tabletops present an opportunity to combine the social advantages of traditional board games with the automated features and reactive gameplay of video games. However, it is unclear whether the addition of automation enhances or detracts from the game experience.

In a collaborative project between SurfNet researchers at Queen's University and the University of Waterloo, a joint study was undertaken to investigate groups playing different versions of the cooperative board game Pandemic, with varying degrees of automation. During the study, twelve groups of players played three different versions of the Pandemic game, each version representing a different combination of media (physical or digital tabletop) and level of automation (low or high automation).

Preliminary analysis of the study data focused on the impact of the



These initial study findings will be presented by Jim Wallace at the ACM CSCW 2012 conference in Seattle, WA next February.

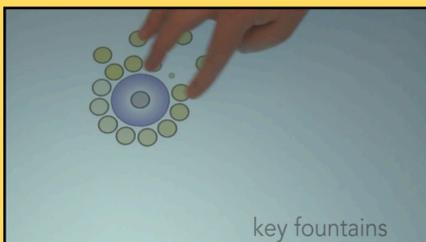
automation on gameplay. We found that the way in which changes in game state are presented strongly influences players' strategies for collaboratively understanding the game state, and affects players' trust in the fairness of computerized opponents. Furthermore, this analysis revealed that players value flexibility in the enforcement of rules, including the ability to "take back"

moves, reinterpret game mechanics, and perform "what-if" scenarios. An advantage of the physical board game that should be considered in the design of future digital tabletop board games was also discovered: providing free table space around the board game surface is useful to enable players to organize and manage game-related roles, responsibilities, and resources.

Research in Review

For SurfNet contact information please go to:
www.nsercsurfnet.ca/pmwiki.php?n=SurfNet.Contact

Exciting Videos



key fountains

Graphical Multi-touch Interaction for Composing and Playing Music

<http://innovis.cpsc.ucalgary.ca/innovis/uploads/Publications/Publications/Lynch2011Interact.wmv>



Supporting Sandtray Therapy on an Interactive Tabletop

<http://innovis.cpsc.ucalgary.ca/innovis/uploads/Publications/Publications/pap1350-hancock.mov>



The Haptic Tabletop Puck Toolkit

http://www.youtube.com/watch?v=R1hDMQWpN0w&feature=player_embedded

This is just a small sample of our videos.

Please go to the following link to see more:

<http://www.nsercsurfnet.ca/pmwiki.php?n=SurfNet.Videos>.

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