

Tangible Play: Research and Design for Tangible and Tabletop Games

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ABSTRACT

This workshop addresses questions related to the areas of tangible interaction, game design and emerging technologies for tangible and tabletop games. We bring together researchers and practitioners from diverse fields related to these topics, such as HCI, computer science, interaction design and game design. We seek collaborative ways to move forward the field of tangible and tabletop games.

ACM Classification: H.5.2 [Information Interfaces and Presentation]: User Interfaces---input devices and strategies, interaction styles; H.5.3 [Information Interfaces and Presentation]: Group and Organization Interfaces---collaborative computing, synchronous interaction.

Keywords: Tangible interface, tabletop, games, interaction design, sensing technologies

INTRODUCTION

Many people of all ages play games, such as board games, PC games or console games. They like game play for a variety of reasons: as a pastime, as a personal challenge, to build skills, to interact with others, or simply for fun.

Some gamers prefer board games over newer genres, because it allows them to socialize with other players face-to-face, or because the game play can be very improvisational as players rework the rules or weave stories around an unfolding game. Conversely, other gamers prefer the benefits of digital games on PCs or consoles. These include high quality 3D graphics, the adaptive nature of game engines (e.g. increasing levels of difficulty based on player experience) and an abundance of digital game content to explore and experience.

With the increasing digitization of our everyday lives, the benefits of these separate worlds can be combined in the

form of tangible games. For example, tangible games can be played on digital tabletops that provide an embedded display and a computer to drive player interactions. Several people can thus sit around the table and play digital games together.

WORKSHOP GOALS

The "Tangible Play" workshop brings together researchers and practitioners working on subjects related to digital games with tangible interaction. We involve participants with backgrounds in academia as well as industry, from diverse fields such as HCI, computer science, edutainment, interaction design and game design.

Some of the specific topics addressed during the workshop include: different tangible interaction styles, designing for specific game types, and the advantages/disadvantages of different sensing and object tracking technologies. We are also interested in the evaluation and potential marketability of these games, and in the ways that researchers from different fields can collaborate to move this field forward.

Submitted position papers may address any topic related to tangible or digital tabletop gaming, from game case studies, to research on tracking technologies, theoretical overviews, or the design of tangible objects for game interaction. Workshop information can be found online at: <http://synlab.gatech.edu/workshops/tangibleplay2007/>

WORKSHOP FORMAT

This is a one-day workshop. The morning session includes position paper presentation by workshop participants and a guest speaker from Philips Research who will provide an industry perspective on tabletop game design. The afternoon session is an informal and interactive discussion in break-out groups on the following subtopics: tangible interaction, game design, sensing technologies, evaluation, marketability or collaboration.

Follow-up efforts stemming from the workshop might include a forum, wiki, or mailing list to keep the discussion going. We also hope the workshop will lead to a special journal issue or a book for publication of results. We are confident that this workshop will facilitate future collaboration and continuing discussions.