
Video Games as Research Instruments

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Abstract

The workshop aims to help researchers share experience and expertise on the use of video games as research instruments in HCI and related disciplines. It will focus on existing uses, methodologies, results and issues with using video games, and is expected to lead to a better shared understanding of their current and future use across a variety of disciplines.

Keywords

Video Games, Experience, Experimental Design.

ACM Classification Keywords

K8.0. Personal Computing: Games.

General Terms

Experimentation, Human Factors

Motivation

Video games have a history of being used as stimuli in experiments that study a range of phenomena. Although a great deal of work is focused on developing and studying games for entertainment and education, they may also be used to investigate more general phenomena, albeit in a video game context.

Interest in more general uses of video games is on the rise in HCI and other disciplines. They have been used to study human error [1], addiction [2] and user experience [3], among other subjects. However, communication between researchers in different areas

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is often limited or nonexistent. There is an untapped opportunity to share experience and expertise.

We aim to find common ground among diverse methodologies, e.g. the need for logging, manipulating existing game dynamics or developing games from scratch for research. This common ground will be identified during the workshop. A potential outcome is to run a course next year at CHI on using video games as research instruments.

Workshop Focus

The objective of the workshop is to encourage discussion amongst researchers who use video games as research instruments, who would not normally talk to each other. It is aimed at researchers from across HCI and related disciplines in order to share good practice and resources while working with video games.

The focus is on research that uses video games to contribute to an understanding of more general phenomena, such as user experience, decision making, human error or addiction, and which is not aimed exclusively (or at all) at game development.

The workshop will cover the variety of uses, methodologies and issues that characterize current efforts to employ video games as research instruments. It will bring together researchers from a variety of disciplines that use video games in their work, to share experience of and expertise in their use.

Workshop Goals

During the workshop, participants will present and discuss their work in order to identify the shared

characteristics and key differences in their use of video games.

At the end of workshop we expect to have an overview of the state-of-the-art, and an improved understanding of the key issues in using video games as research instruments, based on the case studies presented. We will also identify how different areas can learn from each other and perhaps collaborate in the future.

Participants & Community

HCI researchers, computer scientists, psychologists who work with video games are invited to apply. We also encourage researchers from a wider range of disciplines to apply. For example, medical researchers, economists, social scientists, linguists, biologists (protein folding as a game).

Participants from all disciplines that use video games as part of their experimental design are invited to present a 4 page position paper. The paper should focus on the general problem your research addresses, how and why video games are used, an overview of results and a discussion of experiences and issues specific to using games on how video games are used to address their phenomena of interests, and how the experiments were designed to account for the video game. No more than 20 participants will be invited to attend.

The research presented may have aims completely unrelated to video games, or may focus on video games in order to investigate a more general phenomena. Work which is exclusively aimed at development of video games (including serious games) will not be accepted.

We hope the workshop will highlight to the general research community the diverse uses and possibilities of using video games in HCI and related disciplines.

References

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