CALL FOR PAPERS AND DEMOS:
Workshop on Intelligent Educational Games
At The 14th International Conference on Artificial Intelligence in Education (AIED 2009)
Thistle Hotel, Brighton, England
July 6-10, 2009
http://projects.ict.usc.edu/aied09-edgames/

Overview:
Interest in so-called educational games has increased dramatically in the last decade. Not only are games growing in acceptance as learning tools in homes, schools, museums, and corporations, they have also become a target for educational researchers across the globe. Unfortunately, studies of their effectiveness have produced mixed results and new fundamental questions continue to emerge. Many of these questions take us back to the basics of developing computer-based learning environments, such as how to design effective learning environments, evaluate their effectiveness, and manage the tension between discovery and guided learning. So why the need to revisit these issues? What makes games different? Why do many believe that games provide new and important learning opportunities for players? We will ask these questions with a focus on the role of artificial intelligence techniques (e.g., modeling and adaptive algorithms) within game design. Because many educational games that are currently available in the marketplace actually do not adequately support the learner, such intelligent techniques may need to play a larger role in the future of educational games. Given the conference theme of Building Systems that Care, it is especially important to consider games that may be capable of stirring emotions in powerful ways through the use of narrative, sound, graphics, and challenge.

Topics of Interest:
Although the literature on educational games is vast, authors are encouraged to focus on factors that relate closely to learning, the role of artificial intelligence, and on games that are built with the primary intention to teach. General topics of interest include, but are not limited to:

**Motivation:** It is often claimed that games can be made intrinsically motivating, which can be used to keep learners on task for longer periods of time or help them become deeply engaged. What is the nature of this motivation and how does it translate into learning? What are the design principles behind creating motivating games that foster learning? What impact do personalization and choice, well-known findings based on simple twenty year-old games, have on motivation in a world where games are commonplace?

**Assessment:** What approaches have been taken to embed assessments in games? How can learners be accurately assessed based on the activities inherent to the game? What are appropriate measures and methods for conducting formative and summative assessment of the teaching power of games and ensuing learning of players?

**Guidance:** What are the best approaches to providing guidance in game-based learning environments? How should this feedback be constructed and delivered? How does the guidance promote learning? Do established findings on feedback hold up in game-based environments?

**Affect:** In what ways can games influence a learner's affect? Should variables such as fun, fantasy, and frustration be explicitly considered in the design of such games? What roles do narrative, sound, graphics, and challenge play in relation to learning? And how can they be intelligently controlled to influence learner affect?

**Classroom use:** A number of commercial off-the-shelf games have been put to use in the classroom as educational tools. Do such games have a positive effect on learning? If so, what are the attributes of the games that contribute most to learning? How can games be integrated into the classroom and used effectively with other resources? What are the best roles for teachers in game-based learning environments?
Workshop activities:
The Educational Games workshop will combine paper presentations, discussions, demonstrations, and an interactive activity. In this activity, participants will be divided into groups and given the opportunity to conceptualize a game for a particular domain. The goal is to give participants a chance to address basic questions involved in the design of educational games in a concrete way, to discuss the trade-offs, and defend their decisions to the group.

Submission instructions:
Submissions are invited as full papers (up to 10 pages) or demos (up to 4 pages), and are due April 16, 2009. Authors should use the same format as the main conference (http://www.aied2009.com/aied-submissions.html) and submit through the Easychair system (accessible through the workshop website: http://projects.ict.usc.edu/aied09-edgames/).

Authors of full papers will be allocated 20-25 minutes during the workshop to present their papers and have the option to present a demo. Demo-only papers will be given 5 minutes to describe their system to workshop attendees before the demo session.

Organizers:
- H. Chad Lane, University of Southern California, Institute for Creative Technologies (lane <AT> ict.usc.edu)
- Amy Ogan, Carnegie Mellon University, Human-Computer Interaction Institute (aeo <AT> andrew.cmu.edu)
- Valerie Shute, Florida State University, Ed Psych and Learning Systems Department (vshute <AT> fsu.edu)

Program Committee:
- Vincent Aleven, Carnegie Mellon University
- Jim Belanich, U.S. Army Research Institute
- Cristina Conati, University of British Columbia
- Paula Durlach, U.S. Army Research Institute
- Reva Freedman, Northern Illinois University
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- James Lester, University of North Carolina
- Scott McQuiggan, SAS
- Brian Nelson, Arizona State University
- Mark Riedl, Georgia Institute of Technology
- Jody Underwood, Pragmatic Solutions, Inc.
- Mike van Lent, Soar Technologies