

# The Artificial Intelligence and Interactive Digital Entertainment (AIIDE 2007) Workshop on Optimizing Player Satisfaction

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■ This is a report of the second annual workshop on Optimizing Player Satisfaction (OPS), held in conjunction with the Artificial Intelligence and Interactive Digital Entertainment (AIIDE-07) conference. We discuss highlights of this year's workshop and include a discussion for next year's event.

The annual workshop on Optimizing Player Satisfaction (OPS) was held on July 6–8, 2007, in conjunction with the Artificial Intelligence and Interactive Digital Entertainment (AIIDE'07) conference sponsored by AAAI. This was the second workshop in a series started in conjunction with the Simulation of Adaptive Behavior (SAB) conference in 2006. As in the first workshop, our objective for holding this event was to

whet the game AI community's interest in the study, development, and evaluation of methodologies for modeling and augmenting player satisfaction. The primary goal of the OPS workshop series is to encourage a dialogue among researchers in AI, human-computer interaction, affective computing, and psychology disciplines who investigate dissimilar methodologies for improving game-playing experiences. An additional aim of these events is to yield a better understanding of state-of-the-art approaches for optimizing player satisfaction in interactive entertainment systems.

The workshop included three technical sessions, namely, applications, game balance, and interactive storyline, which together comprised oral presentations of seven papers running in parallel to the conference. Each oral presentation was assigned 30 minutes; 10 minutes were left for questions, feedback, and discussion. All accepted papers were included in the workshop proceedings, which have been pub-

lished as an AAAI Press technical report (WS-07-01). Dissimilar AI approaches, varying from dynamic scripting to player modeling and drama management, for modeling and augmenting player satisfaction were presented. Game genres under investigation included prey/predator, real-time strategy, and interactive fiction. In addition to the oral presentation sessions, OPS hosted an invited talk by Chris Bateman, managing director of International Hobo and coauthor of the *21st Century Game Design* textbook. Bateman explored the variety of playing styles and player needs and presented audience models as an approach for guiding game design.

## Future of OPS

The OPS workshop was lauded by AIIDE participants as an exceptionally valuable part of the conference. As a result, all sessions attracted significant interest and participation. After the success of this event, the OPS organizing committee plans to merge this event as a regular special session to the AIIDE conference including recognized keynotes, technical discussion, and, possibly, demo sessions. The primary goal of next year's event is to better establish this innovative field of game AI by attracting submissions of higher quality that meet AIIDE standards.

## Further Information

This event was organized and run by Georgios Yannakakis and John Hallam (Maersk Institute, University of Southern Denmark). For more information, visit the 2007 OPS website.<sup>1</sup> To learn about the latest news about this series of events, subscribe to the Google interest group<sup>2</sup> and visit the upcoming 2008 OPS website.<sup>3</sup>

## Acknowledgements

The workshop organizing committee did a great job in providing suggestions and informative reviews for the submissions; thank you! We would also like to thank the organizing committee of AIIDE and AAAI for managing submissions and notifications and for handling the local arrangements.



## AIIDE Moves to Fall!

The Fourth Annual Artificial Intelligence  
and Interactive Digital Entertainment Conference (AIIDE-08)

October 22–24, 2008

Stanford University, Stanford, California

*Sponsored by the Association for the  
Advancement of Artificial Intelligence (AAAI)*

The call for participation for AIIDE-08 is available at  
[www.aaai.org/Conferences/AIIDE/aiide08.php](http://www.aaai.org/Conferences/AIIDE/aiide08.php).

Technical papers will be due April 22, 2008.  
Please send inquiries to [aiide08@aaai.org](mailto:aiide08@aaai.org)  
or to the conference chair,  
Michael Mateas (University of California, Santa Cruz).

Thanks to them, the event went off smoothly as a parallel track of AIIDE. Our thanks are also extended to the chairs of each session for their contribution in fruitful discussions. This workshop was in part supported by the Danish National Research Council (project number 274-05-0511). Finally, thanks to all the participants; we hope you found this to be useful.

### Notes

1. [www.mip.sdu.dk/~georgios/AIIDE07-Workshop](http://www.mip.sdu.dk/~georgios/AIIDE07-Workshop)
2. [groups.google.com/group/optimizing-player-satisfaction-in-games](http://groups.google.com/group/optimizing-player-satisfaction-in-games)
3. [www.cse.unr.edu/~bdbryant/ops/](http://www.cse.unr.edu/~bdbryant/ops/)

**Georgios N. Yannakakis** received both the five-year diploma (1999) in production engineering and management and the M.Sc. (2001) degree in financial engineering from the Technical University of Crete and the Ph.D. degree in informatics from the University of Edinburgh in 2005. Since 2006 he has been a postdoctoral fellow and principal investigator of the CEPEG project, funded by the Danish National Research Council, at the Maersk McKinney Moller Institute, University of Southern Denmark, where he works in the fields of affective computing, entertainment modeling, game AI, and neuro-evolution. He has been the chair of the two first OPS workshops.

**John Hallam** is a professor at the Maersk McKinney Moller Institute (MMMI), University of Southern Denmark. He graduated with first-class honors in mathematics from the University of Oxford in 1979, completed a Ph.D. in the Department of Artificial Intelligence at the University of Edinburgh in 1984, and joined the teaching faculty in that department in 1985. He established the Edinburgh Mobile Robotics Research Group, having been active in mobile robotics research for almost 25 years, and moved to MMMI in 2003. The current foci of his catholic research interests in artificial intelligence are biological modeling using robotic techniques, evolutionary robotics, and entertainment modeling. He has published approximately 100 journal and international conference papers on various robotic, nonsymbolic computing, and entertainment modeling topics, and he has designed electronic hardware both for research and teaching and commercially.



Figure 1. Opening Presentation at the AIIDE 2007 Workshop.

Photo courtesy David Thue.