

# Preface

Welcome to the first conference on Artificial Intelligence and Interactive Digital Entertainment.

Over the last thirty years, interactive digital entertainment has grown to become a major cultural phenomena and the video game industry is one of the major drivers of advances in computer hardware and software. Artificial intelligence is playing an increasingly important role in games by providing the most engaging challenge of all—playing against and with another intelligent entity. Moreover, interactive digital entertainment provides a fascinating arena for researchers that covers topics central to AI.

The goal for the AIIDE conference is to be the place for the yearly confluence of industry and academe on AI for interactive digital entertainment. It is organized and run by a combination of industry developers and academic researchers, built from the community that arose from the AAAI Spring Symposia on AI and Interactive Entertainment. It is being held in Los Angeles, making it accessible to industrial developers as well as attractive to all participants.

The conference includes invited speakers, a panel on “AI for Serious Games,” and a full program of peer-reviewed papers from academics and game developers. The invited speakers include Doug Church, Chris Crawford, Bing Gordon, Damian Isla, Craig Reynolds, Jonathan Schaeffer, and Will Wright. Doug Church is developer of the games System Shock & Deus Ex. Chris Crawford is the author of classic books on game design and originator of the idea of interactive drama. Bing Gordon is executive vice president and chief creative officer of Electronic Arts. Bing is the conference’s featured speaker, presenting his vision of the impact of AI on the future of computer games. Damian Isla, of

Bungie Studios, will discuss the AI used in the blockbuster hit, Halo 2. Craig Reynolds of Sony, will discuss the use of Sony’s next generation Playstation Cell processors to simulate large crowds in games. Jonathan Schaeffer is an AI game researcher and developer of the world champion checkers program. Finally, Will Wright is a visionary game developer and creator of the Sims from Maxis.

This volume contains all of the papers from the conference. The papers cover the breadth of topics from AI and interactive digital entertainment including the use of machine learning to create games that adapt and extend their own capabilities; the creation of game characters that can communicate with the player through speech and natural language; techniques for creating Hollywood-style camera control in games; and the use of AI to create interactive stories where the player is part of an ongoing drama.

The volume also includes short papers describing the demonstration sessions where researchers and industry developers showcase implementations of their work.

We would like to thank the AAAI Staff, particularly Carol McKenna Hamilton and Keri Harvey, who helped organize the conference and were a pleasure to work with. Without them, this conference would have not been possible.

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