Welcome to the Nineteenth Annual Conference on Innovative Applications of Artificial Intelligence (IAAI-07). The purpose of this conference is to discuss, document, and — indeed — to celebrate the maturation of AI technologies into successful applications.

IAAI is organized as an independent program within the AAAI Conference, with schedules coordinated to allow attendees to move freely between AAAI and IAAI sessions. We appreciate the cooperation of the AAAI organizers, since we believe the collocated conferences both benefit from each other.

AI application developers benefit from learning about the latest AI methods that will enable the next generation of applications. AI researchers benefit by exposure to the challenges of real-world domains and business problems. IAAI-07 addresses the full range of AI methods including knowledge-based systems, constraint systems, multiagent systems, learning, data mining, and personalization technologies.

The conference showcases applications of two types: deployed and emerging. Deployed applications are case studies that provide working guidelines on designing, building, managing, and fielding systems that incorporate AI technologies. This year there are ten deployed applications. These applications provide clear evidence of the impact and value of AI technology in today’s world.

Emerging Applications and Technologies papers describe efforts whose goal is the engineering of AI applications. They inform researchers about the utility of specific AI methods for application domains and also inform application developers about the emerging tools and techniques that will enable the next generation of new applications.

We are very excited about our three invited speakers. Oren Etzioni, director of the Turing Center at the University of Washington, will give the Robert Engelmore Memorial Award Lecture for 2007. Etzioni’s talk will include the Know-ItAll research project, which is focused on machine reading of the world wide web and the self-supervised acquisition of hundreds of millions of facts.

Geoffrey S. F. Ling, from Defense Advanced Research Projects Agency (DARPA), will give an invited talk titled the “Revolutionizing Prostheses” program. This program will create, within this decade, a fully functional (motor and sensory) upper limb that responds to direct neural control.

Matt Brown, from Maxis / Electronic Arts, will give an invited talk titled “Big ‘A,’ Small ‘I’: Smart Ends from Simple Means.” Brown’s talk will cover various elements of the game design, behavioral AI and structure behind The Sims 2 as well as future efforts in products such as The Sims and SimCity.

The Innovative Applications of Artificial Intelligence Conference could not take place without the generous help of many people. In particular, we very much appreciate the hard work and dedication of the IAAI-07 program committee, without whom the technical program would be impossible. We want to acknowledge the professional administrative and planning expertise of Carol Hamilton, Keri Harvey and the entire AAAI staff. They are great to work with, and they make this conference possible. Thanks to the authors of technical papers submitted to IAAI, they provide the evolutionary basis of a quality learning experience. We also want to thank our extraordinary speakers for sharing their insights with the participants in IAAI-07.

We hope you enjoy the conference!

— William Cheetham and Mehmet Goker