

Preface

Welcome to the Twenty-First Innovative Applications of Artificial Intelligence Conference (IAAI-09). The purpose of this conference is to discuss and document the maturation of AI technologies into successful applications.

IAAI is organized as an independent program within the IJCAI Conference, with schedules coordinated to allow attendees to move freely between IJCAI and IAAI sessions. We appreciate the cooperation of the IJCAI 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 and AI researchers benefit by exposure to the challenges of real-world domains, inaccurate and incomplete data, inconsistent environments and users, and last but not least, real business problems.

IAAI showcases applications of two types: deployed and emerging. Deployed applications are currently utilized by end-users to solve real problems in their domains. They are case studies that provide working guidelines on designing, building, managing, and fielding systems that incorporate AI technologies. This year there are four deployed applications. These applications provide clear evidence of the impact and value of AI technology in today's world.

Papers on Emerging Applications and Technologies 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. Bill Swartout, director of the USC's

Institute for Creative Technologies, will give the Robert Engelmores Memorial Award Lecture for 2009. Swartout's talk, titled "Building Virtual Humans: A Decade of Research," will discuss the synergies among the different threads of AI research that are leading to the goal of computer-generated characters that look and behave just like real people.

Luis von Ahn is a professor of Computer Science at Carnegie Mellon University. He will describe how to harness the power of millions of humans and computers together to solve problems that would be impossible for either to solve alone, in his talk entitled "Human Computation."

In his talk "Computational Knowledge, Science and Wolfram|Alpha," Stephen Wolfram will describe the concepts, technology and science that underlie Wolfram|Alpha — an ambitious project to make as much knowledge as possible computable.

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-09 program committee, the invited speakers and the authors of the technical papers, without whom the technical program would not exist. We also want to acknowledge the professional administrative and planning expertise of Carol Hamilton, Keri Harvey, Josette Mausisa and the entire AAAI staff. They are great to work with, and they make this conference possible.

We hope you enjoy the conference!

– Karen Haigh and Nestor Rychtickyj
Program Chair and Cochair