



AAAI-06 Workshop on Cognitive Modeling and Agent-based Social Simulation

Traditionally, artificial intelligence and cognitive science have focused on building deep models of individual cognition at the expense of the sociocultural processes and their relationship to cognition. Agent-based social simulation has been receiving increasing attention from social scientists. However, most models developed to date have assumed rudimentary cognition and social interaction capabilities and the resulting lessons may have less relevance to the real world social phenomena of interest. This workshop aims to bring together cognitive modeling and agent-based social simulation researchers to strengthen a dialogue on the synthesis of the two approaches. Such a synthesis offers us the hope of designing cognitively rich dynamic models of societies that can increase our understanding of a variety of aspects of individual and social behavior.

Topics:

We specially encourage submissions that address the following topics.

- Cognitive architectures of individual cognitive agents.
- Cognitive models of multiagent interactions (e.g., communication, cooperation, teamwork and negotiation).
- Cognitive models of multiagent organizations (e.g., organizational structure and networking, economies, culture, and other coordination structures and mechanisms).
- Simulation-based or computational models of distributed cognition and cognitive artifacts (institutions, conventions, norms, obligations)
- Social cognitive models of reputation and other norm-enforcing mechanisms
- Computational abstractions, languages, and tools for cognitive modeling of agents and multiagent interactions.
- Formal and agent-based models of social behavior

We are particularly interested in submissions that (a) not only address the micro and the macro but also stretch to account for their bidirectional connections, and (b) describe rich models of individual cognition and relate them to the emergent social phenomena. We also welcome papers reporting on practical applications of cognitive architectures such as ACT-R, SOAR, CLARION, and ICARUS to design multiagent systems for multiplayer computer games as well as real world tasks.

Important Dates:

- March 31, 2006: Full paper submission deadline
- April 24, 2006: Acceptance/rejection notices
- May 17, 2006: Camera-ready copy of accepted papers due

Paper Submission & Attendance: Attendance is limited to active participants only. We strongly encourage those interested in attending to submit a paper not exceeding 10 pages formatted according to the AAAI-06 guidelines. Please email a pdf copy to afzal@eecs.utoledo.edu by 3/31/2005.

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