

2007 RESCUE Distinguished Lecture Series

Participatory Multiagent Simulation for Modeling Human Behaviors



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Hiromitsu HATTORI is currently an assistant professor at Kyoto University, JAPAN. From 2004 to 2007, he was a research fellow of the Japan Society for the Promotion of Science (JSPS). During that period, he worked with Dr. Peter McBurney at University of Liverpool as an honorary research assistant, and with Dr. Mark Klein at Massachusetts Institute of Technology as a visiting researcher. He has worked on multiagent systems, with particular focus on negotiation, agent-based electronic commerce support. His current interests include multi-issue negotiation for complex problems, and massively multiagent simulation.

Thursday, November 8, 2007

Refreshments served at 11:15 a.m. with talk to follow at 11:30 a.m.

Calit2 Room 3008

Sponsored by Professor Nalini Venkatasubramanian

ABSTRACT:

Multiagent simulation is promising approach to reproducing and analyzing diverse phenomena which can be viewed as a collective behaviour of agents. We have especially worked on participatory simulation, which enables us to extract actions of human subjects in the simulation environment. We conducted the multiagent simulation for indoor evacuation scenarios and successfully obtained the agent model which can reasonably behave in the scenarios. We then focused on outdoor evacuation and conducted augmented experiment, where an experiment is performed in real wide-space by human subjects enhanced by a large scale multiagent simulation.

We are on track to realize a massively multiagent traffic simulation. We are currently elaborating the implementation of a realistic vehicle agent by using human subjects' behaviors in a 3D virtual driving simulator.