

## NEGOTIATION SUPPORT SYSTEMS MINITRACK

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Negotiation Support Systems (NSS) are designed to assist negotiators in reaching mutually satisfactory decisions by providing a means of communication and through analysis of available information. The purpose of this minitrack is to provide a forum for the interchange of ideas, research results, development activities, and applications among academicians and practitioners in the NSS field. Since 1991, this minitrack has gathered a respectable collection of papers in this young but promising area of research. Collectively, the selected papers in this minitrack continue to offer innovative and thought-provoking research in computer-supported mediation.

The minitrack this year is the result of last year's discussion on various research, teaching and use issues of NSS. Chiu, Cheung, Leung and Hung pursue their research in agent technologies for Web-based negotiation. They present a multi-agent, multi-platform NSS that facilitates and regulates the negotiation processes using constraints (e.g., the adaptation of belief, intention and desire of a negotiator is triggered by a scheduling constraint).

Hung, Li and Jeng discuss the applicability of new Web-technologies that could be selected for developing NSS. Pursuing the communication protocol dimension in negotiation, they propose a framework for an independent declarative XML language, departing from conventional, problem specific frameworks such as ARBAS or IBIS.

In a rather innovative move, Sankaran and Bui use stochastic modeling to support negotiation. The rationale of their approach is to explicitly deal with uncertainty, and more importantly, to provide a method to allow decision-makers to recognize the impacts of sequential decisions.

The section session of this minitrack showcases a number of diverse yet potentially useful

implementations of NSS. Ajenstat and Peter offer a system to support online trading. They prove that a seamless integration between (option-based investment) models and communications and information staging technologies can be a powerful decision support too. With the same desire to provide a system that promotes effective man-machine-interaction, Monzani, Bendahan and Pigneur offer a multi-issue, multi-actor strategic analysis model – MASAM to solve large-scale negotiation problems. They use visualization (OMEN) as a means for actors or antagonists to examine and devise strategies to deal with a number of issues typically present in an alliance, i.e., salience, clout and power to influence.

As discussed in previous sessions of this mini-track, a key factor for NSS adoption and use is the level of trust negotiators have in each other and in the computer system they choose as a mediation platform and support. Sheffield sets up a framework to enable the transition from individual commitments to a social consensus validated by the degree of "rightness for informed action (that is in turn) validated by objective truth". He stresses the importance of designing negotiation processes that can lead intentions to outcomes.

Ehtamo, Hamalainen and Kostinen offer the last paper of this minitrack. They report the lessons learned from using "Joint Gains", e-learning tools for teaching negotiation skills. The authors emphasize the importance of providing an interactive platform to support active learning through role play.

All together, the seven papers selected out of 15 submitted for this year's minitrack highlight the increasing need for negotiation support in the new economy. The quality of the papers also demonstrates the ability of the NSS research community to take up these challenges.