13th International Distributed Artificial Intelligence Workshop

July 28-30, 1994: Seattle, WA USA

Making Connections

Distributed artificial intelligence (DAI) is concerned with the cooperative solution of problems in multi-agent intelligent systems with both computational and human agents. The central problem in DAI is how to achieve coordinated action among such agents, so that they can accomplish more as a group than individually.

The DAI workshop is dedicated to advancing the state of the art in this field. For over a decade now the workshop has gathered a relatively small group of active researchers for intensive discussions on the state of the art as well as fruitful directions for future exploration. Previous DAI Workshops have resulted in nine summaries published in AI Magazine, two volumes of edited papers published by Pitman/Morgan Kaufmann as well as special issues of the journals "Group Decision and Negotiation" and "IEEE Transactions on Systems, Man and Cybernetics".

A wide range of research communities throughout the world are now addressing issues related to DAI. This include work on CKBS (cooperating knowledge-based systems), CSCW (computer-supported cooperative work), ICIS (intelligent cooperating information systems), GDSS (group decision support systems), CE (concurrent engineering), organizational sciences, social psychology, business process management, anthropology and so on. There is also increasing recognition of the need for collaboration support technology in many settings, as evidenced for example by the large international Intelligent Manufacturing System (IMS) Program which envisages future manufacturing facilities based on globally distributed autonomous and intelligent systems. Such potential application areas pose great challenges for DAI.

The goal of the 1994 DAI workshop is therefore "making connections": trying to better understand the connections between DAI and related fields as well as real-world problems. It is hoped that these papers will help readers (1) develop a better understanding of the gaps between current theory and potential applications and (2) identify future research directions that integrate multi-disciplinary efforts to address these gaps.

This workshop received financial support from AAAI and Boeing Computer Services.

Mark Klein, PhD DAI Workshop Chair Boeing Computer Services, MS 7L-44 PO Box 24346 Seattle WA 98124-0346 USA

Voice: +1 (206) 865-3412 Fax: +1 (206) 865-2965

Email: mklein@atc.boeing.com

Kish Sharma, PhD DAI Workshop Co-Chair Boeing Computer Services, MS 7L-44 PO Box 24346

Seattle WA 98124-0346 USA Voice: +1 (206) 865-3353 Fax: +1 (206) 865-2965

Email: ksharma@atc.boeing.com