Thirteenth International Distributed AI Workshop

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■ This article discusses the Thirteenth International Distributed AI Workshop. An overview of the workshop is given as well as concerns and goals for the technology.

Distributed artificial intelligence (DAI) is concerned with the cooperative solution of problems in multiagent 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 as individuals.

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. This year's workshop took place on the Olympic Peninsula in Washington State on 28 to 30 July 1994 and included 45 participants from North America, Europe, and the Pacific Rim.

The goal of this workshop was "making connections," trying to better understand the connections between DAI and related fields (for example, computer-supported cooperative work, group decision support systems, parallel processing, concurrent engineering, organizational science) as well as with real-world applications. As a result, the technical discussions were far ranging and included work on formal theories of coordination and agent beliefs, game theory, communication protocols such as KQML (knowledge query and manipulation language), constraint satisfaction, and agent-based access to heterogeneous data.

An interesting range of applications for DAI technology was also considered, including telecommunications, distributed manufacturing systems, air-combat modeling, and cooperative meeting scheduling. We were also fortunate to have an invited talk by Gul Agha, director of the Open Systems Laboratory at the University of Illinois, which generated a lot of discussion on the connections between DAI and work in concurrent programming languages. The burgeoning growth in DAI led to the initiation of the First International Conference on Multiagent Systems, which was held in June 1995 in San Francisco. The DAI Workshop received financial support from the American Association for Artificial Intelligence as well as the Boeing Company.

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