

## **WORKSHOP ON AGENT SUPPORTED COOPERATIVE WORK**

Tuesday 29th May 2001 - Montreal, Canada

### **Preface & Conference Organization**

#### **Scripting Mobile Agents to Support Cooperative Work in the 21st Century**

*Seng Wai Loke, Arkady Zaslavsky, Brian Yap, Joseph Fonseka, Monash University, Australia*

#### **A knowledge Production Protocol for Cooperative Development of Learning Objects**

*Juan M. Doderó, Miguel A Sicilia, , Universidad Carlos III de Madrid, Spain.  
and Elena Garcia-Barricán, Universidad de Alcalá de Henares, Spain.*

#### **Facilitation of Online Student Group Projects with a Support Agent.**

*Janice Whatley, Martin Beer, University of Salford, UK  
Geof Staniford, John Morres University, UK*

#### **The possible Impact of the Behavioral Characteristics of an Agent in ASCW Performance**

*Tracy Litzinger, Susan Vallance, John A. Wise, Embry-Riddle University, USA*

#### **From Work Practice Models and Simulation to Implementation of Human-Centered Agent Systems**

*Maarten Sierhuis, Ron van Hoof, William J. Clancey, and Mike Scott, NASA/Ames Research Center, USA*

#### **Agent-mediated Online Learning -AMOL**

*Xun Yi, Chee Kheong Siew, Nanyang Technological University, Singapore  
Mahbubur Rahman Syed, Minnesota State University, USA*

#### **Intelligent Agent Support in Engineering Design**

*Brian Lees and Steve Gallagher, University of Paisley, UK*

#### **A Distributed Agent Based System For Supporting Virtual Software Corporations**

*Zsolt Haag, Richard Foley, and Julian Newman, Glasgow Caledonian University, UK*

#### **Tempus Fugit and the Need for an e-Social Contract**

*James Kaufman, Joann Ruvolo, and Daniel Ford, IBM Almaden Research Center, USA*

#### **Peer-to-Peer Adaptive Group Awareness**

*Yiming Ye, Stephen Boies, Paul Huang, IBM TJ Watson Research Center, USA  
John K Tsotsos, York University, Canada*

## PREFACE

The increasing use of networking, coupled with an increasing distribution in the operations of organizations, has resulted in increasing problems of administration, management and control of information and co-ordination of work. With the aim of providing solutions to such problems, research into Computer Supported Co-operative Work (CSCW) is concerned with investigating approaches and technologies for the support of group work, both within and among organizations, in which the group members may be distributed geographically.

In parallel with recent advances in CSCW there have also been interesting developments in the fields of Intelligent Agents and Distributed Artificial Intelligence (DAI), notably in the concepts, theories and deployment of intelligent agents as a means of distributing computer-based problem solving expertise. The concept of intelligent agents has given rise to an exciting new technology of wide potential applicability. In particular, the paradigm of multi-agent systems forms an appropriate basis for the design of CSCW architectures, the support of CSCW operations and for investigating the problems of co-operative working, noted above. The application of a multi-agent approach to CSCW can potentially help to make information exchange among the participants easier, provide support to the participants (e.g. in the form of Decision Support Systems), assist workflows and procedures, and provide convenient user interfaces to CSCW systems. Furthermore, the ideas inherent in such an approach are also applicable to other domains, for example, support for interactive learning. Many organizations, that seek to exploit the advantages offered through CSCW, could derive benefit from the integration of agents in the management and use of their corporate knowledge.

We coined the term *Agent Supported Cooperative Work (ASCW)* to represent researches that fall into the intersections of the areas of CSCW and intelligent agents. These researches include, but not limited to the following:

- multi-agent macroscopic modeling of group work
- Multi-agent cooperation and coordination in social group work
- Multi-agent mechanisms for task decomposition, dispatch and synthesis in group work
- Multi-agent architectures and CSCW
- Multi-agent engineering design support
- User agents in CSCW
- Interface agents in CSCW
- Mobile agents in CSCW

- Agent support for distributed working
- The influence of agents on the work environment
- The role of agents in virtual work environments
- Agent-assisted Web-based distributed awareness
- Agent-assisted group-awareness
- Agent-assisted collaborative editing
- Agents and multi-agent systems in peer-to-peer computing

The Autonomous Agents'01 Workshop on Agents Supported Cooperative Work (ASCW'01), held in Montreal, Canada May 29, 2001, is an effort to bring together researchers and practitioners, from industry and academia, to identify and explore issues, opportunities, and solutions for the new and exciting areas of ASCW. The accepted oral presentation papers show a certain aspect of the state of the art in ASCW.

We hope that you will share with us the intellectual excitement and interest in this emerging area of ASCW by reading the workshop proceedings.

May, 2001

Yiming Ye & Brian Lees, Co-Chair of ASCW'01

## WORKSHOP ORGANIZATION

### Co-Chair:

Dr. Brian Lees	University of Paisley, UK
Dr. Yiming Ye	IBM T.J. Watson Research Center, USA

### Program Committee:

Dr. Elizabeth F. Churchill	FX Palo Alto Lab, USA
Dr. Werner Geyer	IBM T.J. Watson Research Center
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