Twelfth International Workshop CIA 2008

Cooperative Information Agents

September 10 - 12, 2008, Prague, Czech Republic
Czech Technical University

Program Brochure


WHITESTEIN Technologies

Rockwell Automation

CERTICON

CONTENT

PRELIMINARIES

Workshop Venue

The CIA 2008 workshop takes place at the following address:

Czech Technical University
Faculty of Electrical Engineering
Department of Cybernetics
Karlovo namesti 13
121 35 Prague 2
Czech Republic

For local organisational help (available for attendees of the workshop only):

Barbora Jenikova
Phone: +420 224 357 386
Mobile: +420 776 552 356
E-mail: jenikov@fel.cvut.cz

How to reach Prague

Travelling by plane
The modern city airport, Ruzyne, is situated about 20 km northwest of the city centre. There are direct flights from most major European cities.
Facilities in the main building include a 24-hour money exchange office, a few ATMs, fast food places, several travel and accommodation agencies, rental car companies, a post office. There is also a 24-hour left luggage service in the arrival hall.

Travelling by train
Domestic services are provided by CD (Czech Railways). There are number of daily connections to Prague from major European cities.

Train Stations: Hlavni nadrazi is the biggest and main railway station in Prague. There are a 24 hour left-luggage service, food stalls, information and booking offices.

Information on rail connections are available on Tel: +420-224 224 200 or online
http://www.cd.cz/static/eng/

Travelling by coach
The city main bus terminal is Florenc situated on the eastern edge of the New Town easily accessible by tube (yellow line B and red line C) and trams. The majority of internal coaches are run by CSAD. Information on bus connection is available on www.jizdnirady.cz
Numerous international coach services are run by Bohemia Euroexpress International (Krizikova 4-6, Prague 8 - Florenc, Tel: +420-224 814 450, +420-224 218 680, www.bei.cz

How to reach the venue

Timetables are available at the airport information office in the main hall or on www.dpp.cz.

Directions from the airport:

- Take Bus No. 119 to the stop Dejvicka (final stop)
- Underground (Metro) line A to Mustek (4-th)
- Change to the line B and go to the station Karlovo namesti (2-nd)
- Use exit labelled 'Karlovo namesti' (exit closer to the center)

Directions from the main station (Hlavni nadrazi):

- Take the Underground (Metro) line C to Florenc (1-st)
- Change to the line B and go to the station Karlovo namesti (4-th)
- Use exit labelled 'Karlovo namesti' (exit closer to the center)

Directions from the Holesovice nadrazi station:

- Take the Underground (Metro) line C to Florenc (2-nd)
- Change to the line B and go to the station Karlovo namesti (4-th)
- Use exit labelled 'Karlovo namesti' (exit closer to the center)

Taxi from the airport to the venue:

A trip by the taxi from the airport to the city costs up to 700 CZ (Czech kroners) per 2 to 3 persons. Before entering the car check the price with the driver. *It is not recommended to accept a price over 700 CZK*. Destination for reaching the venue: Karlovo Namesti 13, building of Czech Technical University. Then follow navigation signs to the workshop room.

Location of hotels and venue in Prague

Welcome to CIA 2008!

On behalf of the organizing board, we very cordially welcome you to the 12th International Workshop on Cooperative Information Agents (CIA 2008)!
In today's networked world of linked heterogeneous, pervasive computer systems, devices, and information landscapes, intelligent coordination and provision of relevant added-value information at any time, anywhere, by means of intelligent and cooperative information agents becomes increasingly important for a variety of applications.
In keeping with its tradition, the CIA 2008 workshop aims at being a small but very distinguished, interdisciplinary forum for researchers and practitioners to get informed about, present, and discuss the state of the art in research and development of agent-based intelligent and cooperative information systems, and applications for the Internet and related areas such as the Semantic Web and Grid computing.
We are very pleased to offer a carefully selected set of regular and invited talks of excellence that are given by renowned experts in the field. These talks are complemented by system demonstrations, a social program, and last but not least, the best paper and system innovation awards. Finally, our particular thanks go to the generous sponsors of this event as well as to the local organisation team from the Czech Technical University of Prague for their hard work in providing the CIA 2008 event with a traditionally comfortable, modern, and all-inclusive location, and ingenious arrangement of social events.
We are very much looking forward to an inspiring event, and hope that you will enjoy both its scientific and social program celebrating the preliminary end of the series!

Matthias Klusch, Michal Pechoucek, Axel Polleres
Prague, September 2008

Closing the Series

This is the final edition of the annual international workshop series on cooperative information agents (CIA). The research area of intelligent information agents is established within both the scientific community and the business world. But it has been a long way to that since the term "intelligent information agent" has been coined in the seminal work of Mike Papazoglou and his colleagues in 1992. In fact, the CIA workshop series was founded in 1997 to complement the conference series on cooperative information systems (CoopIS) at that time with a small but distinguished workshop forum for all people interested in research and development of *intelligent information agents* for the Internet, the Web and – later on – the Semantic Web.
Since the beginning of the 1990s, an increasing number and variety of agent-based information systems in different application domains such as e-health, e-government, bioinformatics, e-commerce, and logistics has been deployed. In addition, most of the original topics of the CIA series have been taken up by major scientific conferences in relevant disciplines like intelligent agents and multi-agent systems, service-oriented computing, information systems, and P2P computing by default now. Recently, the CIA series has been top-ranked 55 from 620 considered conferences in the domain Artificial Intelligence/Machine Learning (www.cs-conference-ranking.org, July 21, 2008).
So, personally, I think the series did successfully accomplish its mission in support of inter-disciplinary research of intelligent information agents. Whether there will be a need and demand to continue with it or to join forces for a similar enterprise in the future remains to be seen; it largely depends on the further evolution of the field and its sufficient coverage by other major events.
Therefore, I would like to very gratefully thank all authors of submissions, the participants, the invited speakers, as well as each of the brave local organisation teams, the program co-chairs, and the program committee members of all editions for their absolutely impressive and encouraging collaboration in various ways in the past dozen years. My particular thanks go to the sponsors of the series for their generous support, and to the team of Springer for publishing all proceedings as volumes of the Lecture Notes in Artificial Intelligence (LNAI) series. For comprehensive information on the series, please visit www.dfki.de/~klusch/IWS-CIA.html
Finally, I very much hope that you enjoyed participating in the series as much as I did have the very pleasure coordinating it for you across the world. Without all of you, your engagement, support and vivid discussions, the success of this series would have never been possible! **Thank you!!**

With best wishes,
Matthias Klusch

SCIENTIFIC PROGRAM

Wednesday, September 10, 2008

8:15 Registration and Wake-Up Coffee Serving

8:45 - 9:00 Welcome

9:00 - 9:45 **Invited Talk I** [see page 13]

Coordination and Agreement Technologies for Multi-Agent Systems
Sascha Ossowski (Universidad Rey Juan Carlos, Spain)

Session I: Trust

9:45 - 10:15
Eugen Staab, Volker Fusenig and Thomas Engel:
Towards Trust-Based Acquisition Of Unverifiable Information.

10:15 - 10:45
Mark Hoogendoorn, S. Waqar Jaffry and Jan Treur:
Modeling Dynamics of Relative Trust of Competitive Information Agents.

10:45 - 11:15 **Coffee Break**

11:15 - 11:45
Annerieke Heuvelink, Michel Klein and Jan Treur:
A Formal Approach to Belief Aggregation.

11:45 - 12:15 **Q & A (Discussion with Presenters)**

12:15 - 14:00 **Lunch**

14:00 - 14:45 **Invited Talk II** [see page 14]

Agents and Semantic Services: A Critical Review
Katia Sycara (Carnegie Mellon University, USA)

Session II: Applications (1)

14:45 - 15:15
Emilia Garcia, Adriana Giret and Vicent Botti:
Software engineering for Service-oriented Multi-Agent Systems.

15:15 - 15:45
David Vallejo, Javier Albusac, Carlos Gonzalez-Morcillo and Luis Jiménez:
A Service-Oriented Multi-Agent Architecture for Cognitive Surveillance.

15:45 - 16:15 **Coffee Break**

16:15 - 16:45
Martin Rehak, Michal Pechoucek, Martin Grill and Karel Bartos:
Trust-Based Classifier Combination for Network Anomaly Detection.

16:45 - 17:15
Markus Zanker:
A Distributed Generative CSP Framework for Multi-Site Product Configuration.

17:15 - 17:45 **Q & A (Discussion with Presenters)**

19:00 - 20:30 >>> Welcome Reception <<< [see page 11]

Thursday, September 11, 2008

8:30 Wake-up Coffee Serving

9:00 - 9:45 **Invited Talk III**

Enabling Networked Knowledge.
Manfred Hauswirth (DERI Galway, Ireland)

Session II: Applications (2)

9:45 - 10:15
Christian Erfurth, Steffen Kern, Wilhelm Rossak, Peter Braun and Antje Lessmann:
MobiSoft: Networked Personal Assistants for Mobile Users in Everyday Life.

10:15 - 10:45
Sergio Saugar and Juan Manuel Serrano:
A Web-based Virtual Machine for Developing Computational Societies.

10:45 - 11:15 **Coffee Break**

11:15 - 11:45
Maiko Kawasoe, Tatsuya Narita and Yasuhiko Kitamura:
Using the Wizard of Oz Method to Train Persuasive Agents.

11:45 - 12:15
Andres Muñoz and Juan Botia:
ASBO: Argumentation System Based on Ontologies.

12:15 - 12:30 **Q & A (Discussion with Presenters)**

12:30 - 13:45 **Lunch**

Session IV: System Demonstrations

Demonstrations of CIA 2008 System Award Nominees
- **NegoSim**: Simulator for Agent-Based Bilateral Multi-Issue Closed Negotiations.
- **ASBO**: An Argumentation System Based on Ontologies.

Discussion. Public Voting on Systems Presented.

14:30 - 22:00 >>> Social Program <<< [see page 11]

Friday, September 12, 2008

8:45 Wake-up Coffee Serving

9:00 – 9:45 **Invited Talk IV** [see page 15]

Agents and Databases: A Symbiosis?
Heiko Schuldt (University of Basel, Switzerland)

Session V: Coordination and Communication

9:45 - 10:15
Toshiharu Sugawara, Toshio Hirotsu, Satoshi Kurihara and Kensuke Fukuda:
Controling Contract Net Protocol by Local Observation for Large-Scale Multi-Agent Systems.

10:15 - 10:45
Jan Tozicka, Stepan Urban, Magdalena Prokopova and Michal Pechoucek:
Filter Allocation Using Iterative ECNP.

10:45 - 11:15 **Coffee Break**

11:15 - 11:45
Flavien Balbo and Julien Saunier:
On the Use of Symbolic Data Analysis to Model Communication Environments.

11:45 - 12:15
Viji Avali and Michael Huhns:
Commitment-Based Multiagent Decision Making.

12:15 - 12:30 **Q & A (Discussion with Presenters)**

12:30 - 14:00 **Lunch**

14:00 - 14:30 **Invited Talk V** [see page 16]

Agent-Supported Planning in Distributed Command and Control Environments.
James H. Lawton (US Air Force Research Lab, USA)

Session VI: Negotiation

14:30 - 14:30
Koen Hindriks, Catholijn Jonker and Dmytro Tykhonov:
Towards an Open Negotiation Architecture for Heterogeneous Agents.

14:30 - 15:00
Jan Doubek, Jiri Vokrinek and Michal Pechoucek:
Incrementally Refined Acquaintance Model for Consortia Composition.

15:00 - 15:30 **Coffee Break**

15:30 - 16:00
Nora Faci, Sanjay Modgil, Nir Oren, Felipe Meneguzzi, Simon Miles and Michael Luck:
Towards a Monitoring Framework for Agent-Based Contract Systems.

16:00 - 16:30
Shay Raz, Raz Lin and Onn Shehory:
Collaborative Load-Balancing in Storage Networks Using Agent Negotiation.

16:30 - 17:00 **Q & A (Discussion with Presenters)**

Session VIII: Closing

17:00

- **CIA 2008 Best Paper Award Giving**
- **Closing of the CIA 2008 Workshop and the Series**

SOCIAL PROGRAM

Wednesday, September 10, 2008 **19:00 – 21:30**

Welcome Reception In the restaurant "Nebozizek" .
You will be provided with a map how to easily reach this very nice place with view on Prague.

Thursday, September 11, 2008 **14:30 – 22:00**

A shuttle will bring us from the workshop venue to Strahov Abbey [14:30 – 15:00].

(1) Visit to Strahov Abbey at Prague Castle

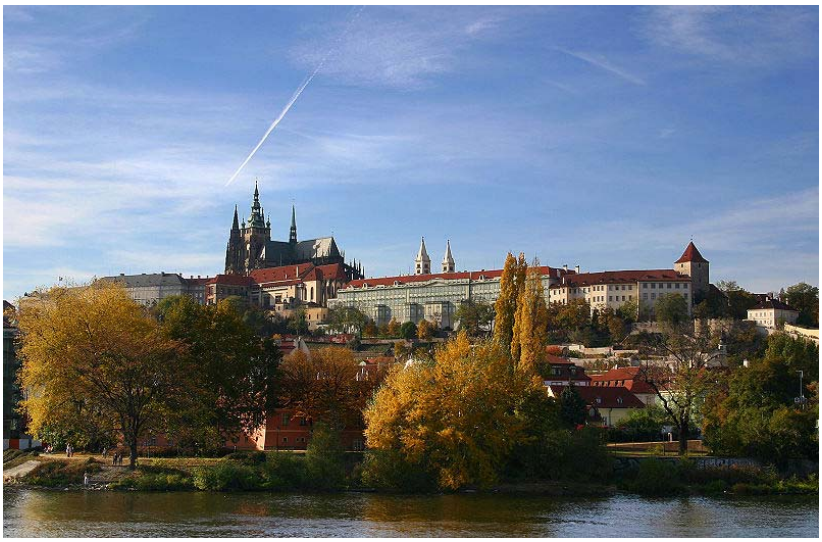
Strahov Abbey is the Royal Canonry of Premonstratensians and one of the oldest monasteries of the Premonstratensian Order in the world. It has been founded by King Vladislav II in 1142, and a working monastery practically ever since then: Fire, the Hussite Wars, religious wars, and the Communists all failed to shut down this institution. The Premonstratensians an integral part of the Roman Catholic Church, in particular an order of canons founded in 1120 by St Norbert. [15:00 – 15:45]

(2) Visit to the Strahov Monastic Brewery with Tasting

Frankly, what would a visit to Prague be without a visit to one of its world-famous breweries? You got the point.☺ We will have a guided visit to one of the prominent breweries in Prague, the Strahov Monastery brewery right in the building of the Strahov Monastery which was founded by King Vladislav II in 1142. The brewery was closed in 1907 and reopened after extensive restoration work of the whole building complex around it in 2000. [15:45 – 17:00]

(3) Guided Visit to Prague Castle and Gardens

The Strahov Abbey and its brewery are very closely located to Prague Castle, the Hradschin. Thus, we will walk directly from the Abbey to the castle and have a guided visit through only part of its historic building, courtyard and old gardens.



After 2.5 hours wandering this cultural and historic site, we will pass through Lesser Town and cross the river to reach Old Town. [17:15 – 20:00]

(4) Social Dinner on a Cruising Motorboat with Live Jazz Music

At Old Town square, we will board a small motorboat that is cruising two hours on the river Moldau in Prague while we have our buffet serviced dinner with live Jazz music by the selected Petra Vlkova Band. After a long day of talks and walking this is just a nice place in Prague to relax and enjoy the view from the boat, the food and beer, the music and other colleagues you always wanted to talk to, or to ask something about the-universe-the-fish-and-the-rest but never dared to do … And we will announce this year's winner of the system award. Have fun and enjoy the trip! ☺ It is the very last and hopefully a sunny one of the series. [20:00 – 22:00]

For more information on past social programs of the series at different locations in Europe, please visit **www.dfki.de/~klusch/IWS-CIA-home.html#events**

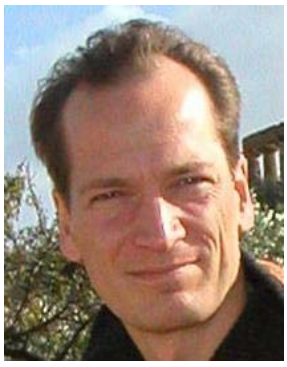
Invited Talks & Speakers

Wednesday, September 10, 2008, 9:00 – 9:45

Coordination and Agreement Technologies for Multi-Agent Systems

Sascha Ossowski (Universidad Rey juan Carlos, Spain)

It is commonly accepted that coordination is a key characteristic of multiagent systems and that, in turn, the capability of coordinating with others constitutes a centrepiece of agenthood. However, the key elements of coordination models, mechanisms, and languages for multiagent systems are still subject to considerable debate. In this talk, I will examine different stances on coordination, and outline various research issues related to coordination in multiagent systems. In particular, I will provide several examples of the benefits of using an organization-oriented approach towards the problem. I will then show how this perspective fits into current efforts working towards a paradigm for smart, next-generation distributed systems, where coordination is based on the concept of agreement between computational agents. Besides organizations, semantic alignment, norms, argumentation and negotiation, as well as trust and reputation mechanisms will be in the technology sandbox to support the definition, specification, and verification of such systems.



Sascha Ossowski is the Director of the Centre for Intelligent Information Technologies (CETINIA) at University Rey Juan Carlos in Madrid. Formerly, he was an HCM/TMR research fellow at the AI Department of Technical University of Madrid. He obtained his MSc degree in Informatics from the University of Oldenburg (Germany) in 1993, and received a PhD in Artificial Intelligence from UPM in 1997. Prof. Ossowski is holding several research grants in the field of advanced software systems, funded by the European Commission and the Spanish Government. He has authored more than 100 research papers, focusing on the application of Artificial Intelligence techniques to real world problems such as transportation management, m-Health, or e-Commerce. Recently, he has been particularly active in the field of co-ordination mechanisms for agents and services, as well as models of trust and regulation in virtual organisations. He is co-editor of more than 20 books, proceedings, and special issues of international journals. He is a General Chair of the ACM Annual Symposium on Applied Computing (SAC), chairs the Steering Committee of the European workshop series on Multiagent Systems (EUMAS), serves as a member of the editorial board for several international journals, and acts as programme committee member for numerous international conferences and workshops. Homepage: www.ia.urjc.es/~sossowski/

Wednesday, September 10, 2008, 14:00 – 14:45

Agents and Semantic Services: A Critical Review

Katia Sycara (Carnegie Mellon University, USA)

In this talk, I will present requirements and extensions on web services functionality for supporting business processes. Some of these extensions include peer to peer and multi-party interactions, dynamic on the fly composition of web services, message patterns that go beyond request-response, contracts and service level agreements. In particular, I will articulate the importance of formally specied, unambiguous semantics for increasing service interoperability and exibility of interactions, thus bringing the services and agents paradigms and tech nologies closer to one another. A first step towards this rapprochement is the development of formal languages and inference mechanisms for representing and reasoning with core concepts of Web Services. In closing, I present my vision of Web services as autonomous goal-directed agents which select other agents to interact with, and exibly negotiate their interaction model, acting in peer to peer fashion. The resulting Web services, that I call *Autonomous Semantic Web services*, utilize ontologies and semantically annotated Web pages to automate the fulllment of tasks and transactions with other Web agents.

Katia Sycara is Professor in the School of Computer Science at Carnegie Mellon University and holds the Sixth Century Chair in Computing Science at the University of Aberdeen in the U.K. She is the Director of the Laboratory for Agents Technology and Semantic Web Technologies. She holds a PhD in Computer Science from Georgia Institute of Technology and an Honorary Doctorate from the University of the Aegean. She is a Fellow of the Institute of Electrical and Electronic Engineers (IEEE), Fellow of the American Association for Artificial Intelligence (AAAI) and the recipient of the 2002 ACM/SIGART Agents Research Award.
She is a member of the Scientific Advisory Board of France Telecom, and a founding member and member of the Board of Directors of the International Foundation of Multiagent Systems (IFMAS); as well as founding member of the Semantic Web Science Association. For more details on her work, visit www.cs.cmu.edu/~softagents.

Thursday, September 11, 2008, 9:00 – 9:45

Enabling Networked Knowledge

Manfred Hauswirth (DERI Galway, Ireland)

The wealth of information and services on today's information infrastructures has significantly changed everyday life and has substantially transformed the way in which business, public and private interactions are performed. The Web has enabled information creation and dissemination, but has also opened the information floodgates. The enormous amount of information available has made it increasingly difficult to find, access, present and maintain the information required. As a consequence, we are "drowning in information and starving for knowledge." Although knowledge is inherently strongly interconnected and related to people, this interconnectedness is not reflected or supported by current information infrastructures. The lack of interconnectedness hampers basic information management and problem-solving and collaboration capabilities, like finding, creating and deploying the right knowledge at the right time. Thus, the focus on "Enabling Networked Knowledge" is essential, where Networked Knowledge = Web + Semantics. Knowledge is the fuel of our increasingly digital service economy (versus manufacturing economy); linking information is the basis of economic productivity. This talk will discuss the research issues to realize the vision of Networked Knowledge.

Manfred Hauswirth is Vice-Director of the Digital Enterprise Research Institute (DERI), Galway, Ireland and professor at the National University of Ireland, Galway (NUIG). He holds an M.S. (1994) and a Ph.D. (1999) in computer science from the Technical University of Vienna. From January 2002 to September 2006 he was a senior researcher at the Distributed Information Systems Laboratory of the Swiss Federal Institute of Technology in Lausanne (EPFL). His main research interests are on semantic sensor networks, sensor networks middleware, large-scale semantics-enabled distributed information systems and applications, peer-to-peer systems, Internet of things, self-organization and self-management, Semantic Web services, and distributed systems security. He has published over 70 papers in these domains, he has co-authored a book on distributed software architectures (Springer) and several book chapters on P2P data management and semantics. He has served in over 130 program committees of international scientific conferences and was program co-chair of the Seventh IEEE International Conference on Peer-to-Peer Computing in 2007 and general chair of the Fifth European Semantic Web Conference in 2008. He is a member of IEEE and ACM and is on the board of WISEN, the Irish Wireless Sensors Enterprise Led Network , and the scientific board of the Corporate Semantic Web research center at FU Berlin. Homepage: www.manfredhauswirth.org/

Friday, September 12, 2008, 9:00 – 9:45

Agents and Databases: A Symbiosis?

Heiko Schuldt (University of Basel, Switzerland)

Over the last decades, data and information management has been subject to significant changes. Access to data and information is no longer provided by monolithic database systems. Rather, applications need to cope with an increasing number of heterogeneous and distributed data and information sources, ranging from traditional databases, large document collections to information sources on the Internet and the Semantic Web.
This development also affects the way data and information is searched, accessed, and processed and has been addressed, in parallel but to a large extent independently, by the agent community and the database community.
The objective of this talk is to present some of these activities, with a focus on recent developments coming from the database community. In particular, the hyperdatabase vision and two concrete realizations of this vision will be discussed in more detail to exemplify the relationship between both fields and to identify possibilities for symbiotic co-existence.

Heiko Schuldt is professor of computer science at the University of Basel and head of the Database and Information Systems group since October 2005 and also adjunct professor at the University of Health Sciences, Medical Informatics and Technology (UMIT) in Tyrol, Austria, since 2006. He studied computer science at the University of Karlsruhe and received a PhD in 2000 from ETH Zürich. Between 2003 and 2006, he has been associate professor at UMIT. His research interests include Databases and Information Systems in Healthcare and Life Sciences, Digital Libraries, Distributed Information Systems, Workflow Management, Transaction Models and Reliable Infrastructures for Distributed Applications (Web Services, Grid Computing, Multi-Agent Systems). He has published more than 70 papers in international journals and conferences. He is member of IEEE, ACM, SIGMOD, SI and GI.
Homepage: dbis.cs.unibas.ch/team/heiko-schuldt-1

Friday, September 12, 2008, 14:00 – 14:30

Agent-Supported Planning in Distributed Command and Control Environments

James H. Lawton (US Air Force Research Lab, USA)

To be able to meet the future challenge of employing forces anywhere in the world in support of national security objectives, modern military forces require highly synchronized, distributed planning and re-planning capabilities that are sufficiently flexible to adapt to any level of conflict. This talk will present a research program underway at the USAF Research Laboratory's Information Directorate known as DEEP (Distributed Episodic Exploratory Planning). DEEP is an agent-based distributed planning system that has been designed to support future military command and control (C2) operations. The talk will discuss the motivation for moving from a centralized planning model to a distributed mixed-initiative approach, along with the DEEP architecture and the key research challenges for achieving this vision. The distributed agent-supported planning capabilities, which utilize past experience to solve current problems, will be emphasized.

James H. Lawton manages the Agents Technology Group at the US Air Force Research Laboratory¹s Information Directorate, where he has worked for more the two decades. He also holds a visiting scientist position at Cornell University. He is the program chair for the Knowledge Systems for Coalitions Operations (KSCO) conference, and has served on program committees for several other conferences, including the International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS). His research interests center around the control and coordination of multi-agents systems, and include such topics as multi-agent planning, adversarial modeling, and distributed episodic reasoning. Dr. Lawton received his Ph.D. in Computer Science from the University of New Hampshire, and an M.S. and B.S. in Computer Science from Syracuse University.

Awards

CIA 2008 Best Paper Award

The CIA 2008 workshop series issues a Best Paper Award.
Only submissions to the workshop are eligible for nomination and are evaluated by the program committee, sponsors, and co-chairs. The nominees are marked in the program. This award is sponsored by the workshop series with 300 Euros.

The best paper award giving is scheduled for the closing session of the workshop on Friday, September 12, 2008, 17:00

CIA 2008 System Innovation Award

The top-ranked finalists for this award have been selected by the program committee, sponsors, and co-chairs. This year's award is sponsored by Whitestein Technologies, Switzerland. The winning prize is 500 Euros.

Each of the nominated agent systems has to be demonstrated live (running prototype) to the public, and is evaluated against the following criteria: core functionality, main techniques used, experimental results, innovative features in comparison to other existing systems.

The nominated systems are presented to the public on Thursday, September 11, 12:30 – 13:45 in the demonstration session (Session IV).

The final decision on the winner of this year's award depends on the result of

- the public voting of workshop attendees,
- the voting of the program committee, and
- the voting of the co-chairs

after the public system demonstrations.

The system award will be given during the social dinner on Thursday, September 11, in the evening.

Previous winners of the CIA Best Paper Award:

2007 (LNAI 4676)
"An Agent Architecture for Hybrid P2P Free-Text Search."
By Avi Rosenfeld, Claudia Goldman, Gal Kaminka and Sarit Kraus (Bar-Ilan U, Israel)

2006 (LNAI 4149)
"Learning to Negotiate Optimally in Non-Stationary Environments"
Vidya Narayanan, Nicholas R. Jenning (U Southampton, UK)

2005 (LNAI 3550) Joint Best Paper Award with MATES 2005 Conference
"BSCA-P: Privacy Preserving Coalition Formation"
Bastian Blankenburg, Matthias Klusch (DFKI, Germany)

2004 (LNAI 3191)
"A Probabilistic Approach to Predict Peers' Performance in P2P Networks"
Zoran Despotovic, Karl Aberer (EPFL, Switzerland)

2003 (LNAI 2782)
"Ostensive Automatic Schema Mapping for Taxonomy-based Peer-to-Peer Systems"
by Yannis Tzitzikas and Carlo Meghini (Istituto di Scienza e Tecnologie dell' Informazione; Consiglio Nazionale delle Ricerche CNR, Pisa, Italy)

2002 (LNAI 2446)
"Acquiring an Optimal Amount of Information for Choosing from Alternatives"
by Rina Azoulay-Schwartz and Sarit Kraus (Israel, USA)

2001 (LNAI 2182)
"Optimality and Risk in Purchase at Multiple Auctions"
by Onn Shehory (IBM Research, Israel)

Previous winners of the CIA System Innovation Award:

2007
MAGARRO: A MultiAgent System for Physically based Rendering Optimization.
Developed by Carlos Gonzalez-Morcillo, Gerhard Weiss, Luis Jiménez, David Vallejo, and Javier Albusac (Spain)

2006
Miracle: Market-Inspired Approach to Collaborative Learning.
Developed By Jan Tozicka, Michal Jakobm Michal Pechoucek (TU Prague, Czech Republic)

2005
Bibster: A Semantics-based Bibliographic P2P System.
Developed by Jeen Broekstra, Marc Ehrig, Peter Haase, Frank van Harmelen, Maarten Menken, Peter Mika, Michal Plechawski, Pawel Pyszlak, Björn Schnizler, Ronny Siebes, Steffen Staab, Christoph Tempich (U Karlsruhe, VU Amsterdam)

Special Price for "Best Innovation/Effort Relation":
GruSMA: An Agent-Based Knowledge Acquisition Platform.
Developed by David Sánchez Ruenes, David Isern, Antonio Moreno (Spain)

2004
A-Globe: Agent Platform with Inaccessibility and Mobility Support.
Developed by David Sislák, Milan Rollo, Michal Pechoucek (CTU, Czech Republic)

2003
ACCESS: An Agent System for Ubiquitous Service Delivery.
Developed by Conor Muldoon, Gregory O' Hare, Donnacha Phelan, Robin Strahan, and Rem Collier (University College of Dublin, Ireland)

2002
First prize:
VPC: Virtual Private Community System.
Developed by T. Iwao, M. Okada, K. Kawashima, S. Matsumura, H. Kanda, S. Sakamoto, T. Kainuma, M. Amamiya (Fujitsu, Japan),

and

Mars & Venus: Competitive Information Recommendation System.
Developed by Y. Kitamura, T. Sakamoto, S. Tatsumi (Osaka U, Japan)

Third prize:
Tourists on the Move.
Developed by M. Laukkanen, H. Helin, H. Laamanen (Sonera Corporation, Finland)

2001
First prize:
LEAP - Enabling FIPA agents on small devices.
Developed by Federico Bergenti et al. (University of Parma, Italy)

Second prize:
Towards efficient and reliable agent communication in wireless environments.
Developed by Heikki Helin et al. (Sonera Corporation, Finland)

Student Travel Grants

There has been limited financial support provided to the following students as (co-) authors of accepted papers to present their work at the CIA 2008 workshop:

1. **Shay Raz (Bar-Ilan University, Israel)**
2. **David Vallejo Fernández (University of Castilla-La Mancha, Spain)**
3. **Emilia Garcia Marques (Universidad Politécnica de Valencia, Spain)**
4. **Andrés Muñoz Ortega (Universidad de Murcia, Spain)**
5. **Syed Waqar ul Qounain Jaffry (Vrije Universiteit Amsterdam, Netherlands)**

These grants were sponsored by IEEE FIPA.

Organisation

Co-Chairs

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