

Eleventh International Workshop CIA 2007

Cooperative Information Agents

September 19 - 21, 2007, Delft, The Netherlands
Technical University of Delft



Program Brochure

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PRELIMINARIES

Workshop Venue

The CIA 2007 workshop takes place at the following address:

TU Delft
Aula Congress Centre, Commission Room 3
Mekelweg 5
2628 CC Delft
The Netherlands

The Service Desk of the Aula Congress Centre can be reached via phone at:
+31 (0) 15 278 8022

How to reach Delft:

Fly into Amsterdam International Airport Schiphol, and then take a train directly from the airport to Delft via The Hague (40 min in total from Schiphol to Delft):

1. From Schiphol (railway station is directly in the airport) to Den Haag HS main railway station: 28 min
Highly frequent connection, easy to use ticket vending machines
2. From Den Haag HS To Delft: 10 min
Frequent connection
3. From Delft Central Station you can take a taxi to the hotel.

For a map of recommended hotels in Delft see below.

How to reach the venue:

The venue is the Aula Congress Centre of the Delft University of Technology (Mekelweg 5, see map below)

By Bus

The TU Campus can be reached from Delft Station **by bus** with the district lines 69, 121 or 129.

For more information on times etc. see also de Reiswijzer

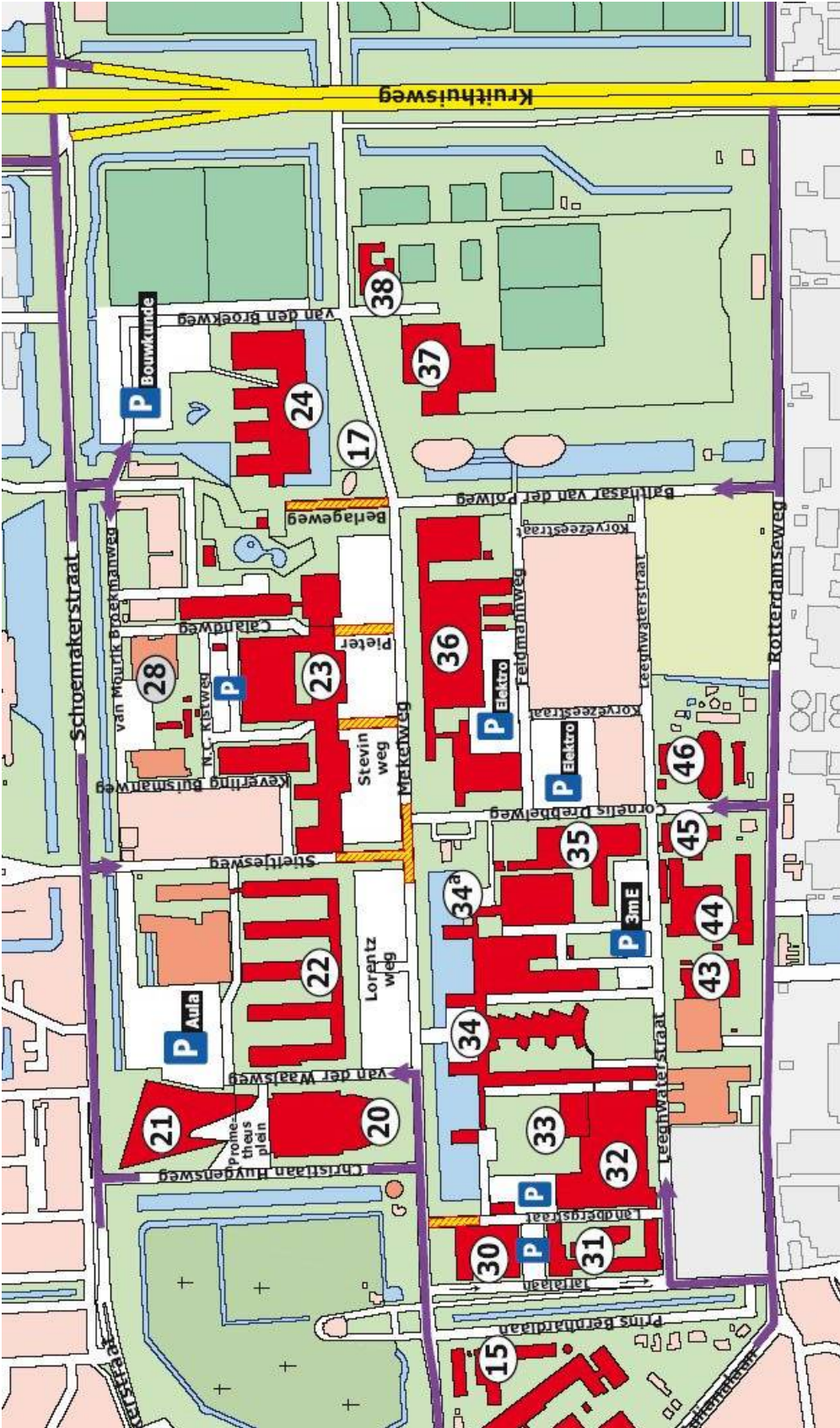
<http://www.9292ov.nl/> (in Dutch).

By Car

The TU Campus is easily accessible by car via the motorway exit A13 / exit Delft Zuid/TU-wijk.

Location of the venue on campus of the Technical University of Delft

The workshop takes place in the building with number 20 on the map below.



Welcome to CIA 2007!

On behalf of the organizing board, we very cordially welcome you to the Eleventh International Workshop on Cooperative Information Agents (CIA 2007)!

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 2007 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 cover a broad area of topics of interest such as aspects of agent based information provision, agents and services, rational cooperation, resource and task allocation, communication and cooperation, agent-based Grid computing, and applications. 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 Technical University of Delft ICT for their hard work in providing the CIA 2007 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 tenth anniversary of the series!

Matthias Klusch, Koen Hindriks, Michael Papazoglou, Leon Sterling,
Delft, September 2007

SCIENTIFIC PROGRAM

Wednesday, September 19, 2007

8:15 Registration and Wake-Up Coffee Serving

8:45 - 9:00 Welcome

Matthias Klusch and Koen Hindriks

9:00 - 9:45 Invited Talk I

[see page 14]

Managing Sensors and Information Sources Using Semantic Matchmaking and Argumentation

Alun Preece (University of Aberdeen, UK)

Session I: Information Search and Processing

9:45 - 10:15

An Agent Architecture for Hybrid P2P Free-Text Search¹

Avi Rosenfeld, Claudia Goldman, Gal Kaminka, Sarit Kraus (Jerusalem College/Bar-Ilan U/Samsung Research, Israel)

10:15 - 10:45

Multi-agent cooperative planning and information gathering.

Fariba Sadri (Imperial College London, UK)

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

11:15 - 11:45

Using Distributed Data Mining and Distributed Artificial Intelligence for Knowledge Integration.

Ana Carolina de Paula, Braulio Avila, Edson Scalabrin, Fabricio Enembreck (Pontificia U, Brasil)

11:45 - 12:15

Quantifying the Expected Utility of Information in Multi-Agent Scheduling Tasks.

Avi Rosenfeld, Sarit Kraus, Charlie Ortiz (Bar-Ilan U, Israel)

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

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

Registered participants will be served with lunch all days of the workshop in the restaurant "Brasserie Blauw" of the TU Delft AULA Congress Centre.

¹ CIA 2007 Best Paper Award Nominee 1/3

14:00 - 14:45 Invited Talk II

A Delegation Framework Applied to Aerial Robotic Scenarios.

[see page 15]

John Jules Meyer (U Utrecht, The Netherlands)

Session II: Applications (1)

14:45 - 15:15

Agent-Based Traffic Control Using Auctions.

Heiko Schepperle, Klemens Boehm (U Karlsruhe, Germany)

15:15 - 15:45

High-Performance Agent System for Intrusion Detection in Backbone Networks.

Martin Rehak, Michal Pechoucek, Pavel Celeda, Vojtech Krmicek, Pavel Monicec, David Medvigy (TU Prague/Masaryk U, Czech Republic)

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

16:15 - 16:45

A Multiagent System for Physically based Rendering Optimization.

Carlos Gonzalez-Morcillo, Gerhard Weiss, Luis Jimenez, David Vallejo, Javier Albusac (U Castilla-LaMancha, Spain; SCCH, Austria)

16:45 - 17:00 Q & A (Discussion with the Presenters)

Session III: Applications (2)

17:00 - 17:30

NN-Based Multiagent System for Simulation of Investing Strategies.

Darius Plikynas, Rimvydas Aleksiejunas (Vilnius Management Academy, Lithuania)

17:30 - 18:00

Business Ecosystem Modelling: Combining Natural Ecosystems and Multi-Agent Systems.

Cesar Marin, Iain Stalker, Nikolay Mehandjiev (U Manchester, UK)

18:00 - 18:30

From Local Search To Global Behavior: Ad Hoc Network Example.

Osher Yadgar (SRI International, USA)

18:30 - 18:45 Q&A (Discussion with the Presenters)

19:00 - 20:30 >>> Welcome Reception <<<

[see page 12]

Thursday, September 20, 2007

8:30 Wake-up Coffee Serving

9:00 - 9:45 Invited Talk III

[Analysis of Negotiation Dynamics.](#)

Catholijn Jonker (TU Delft, The Netherlands)

[see page 16]

Session IV: Rational Cooperation

9:45 - 10:15

A Generic Framework for Argumentation-Based Negotiation.

Markus Geipel, Gerhard Weiss (ETH Zurich, Switzerland; SCCH, Austria)

10:15 - 10:45

The Effect of Mediated Partnerships in Two-Sided Economic Search.

Philip Hendrix, David Sarne (Harvard U, USA)

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

11:15 - 11:45

Who Works Together in Agent Coalition Formation?

Vicki Allan, Kevin Westwood (Utah State U, USA)

11:45 - 12:00 Q & A (Discussion with the Presenters)

Session V: System Demonstrations (CIA 2007 System Award Nominees)

12:00 - 12:20

MAGARRO - Multi AGent ARchitecture for Rendering Optimization

Presenter: *Carlos Gonzalez-Morcillo (UCLM, Spain)*

12:20 - 12:40

POEM - Physics-Oriented Emergent MANet

Presenter: *Osher Yadger (SRI International, USA)*

12:40 - 13:00

- Q & A: Discussion with the CIA 2007 System Award Nominees.

- Public Voting on the Systems.

13:00 - 14:00 **Lunch**

14:00 - 23:00 >>> Social Program <<<

[see page 12]

- *Visit to the Vermeer Center*

- *Visit to the Royal Delft Factory*

- *Dinner at De Prinsenkelder with CIA 2007 System Innovation Award Giving*

Friday, September 21, 2007

9:00 Wake-up Coffee Serving

9:30 - 10:15 Invited Talk IV

[see page 17]

[The Games Between Agents and Ants.](#)

Jaap van den Herik (U Maastricht, The Netherlands)

Session VI: Interaction and Cooperation

10:15 - 10:45

Using Ant's Brood Sorting to Increase Fault Tolerance in Linda's Tuple Distribution Mechanism.

Matteo Casadei, Ronaldo Menezes, Mirko Viroli, Robert Tolksdorf (U Bologna / Florida Tech / FU Berlin, Italy/USA/Germany)

10:45 - 11:15

Agent Behavior Alignment: a Mechanism to Overcome Problems in Agent Interactions During Runtime.

Gerben Meyer, Nick Szirbik (U Groningen, The Netherlands)

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

11:45 - 12:15

Methods for Coalition Formation in Adaptation-Based Social Networks.

Levi Barton, Vicki Allan (Utah State U, USA)

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

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

Session VII: Trust

14:00 - 14:30

Trust Modeling with Context Representation and Generalized Identities²

Martin Rehak, Michal Pechoucek (TU Prague, Czech Republic)

14:30 - 15:00

Learning Initial Trust among Interacting Agents.

Achim Rettinger, Matthias Nickles, Volker Tresp (TU Munich/Siemens ICT, Germany)

15:00 - 15:30

A Probabilistic Framework for Decentralized Management of Trust and Quality³

Le-Hung Vu, Karl Aberer (EPF Lausanne, Switzerland)

² CIA 2007 Best Paper Award Nominee 2/3

³ CIA 2007 Best Paper Award Nominee 3/3

15:30 - 16:00 **Coffee Break**

16:00 - 16:30

Formal Analysis of Trust Dynamics in Human and Software Agent Experiments
Tibor Bosse, Catholijn Jonker, Jan Treur, Dmytro Tykhonov (VU Amsterdam/TU Delft, Netherlands)

16:30 - 16:45 Q & A (Discussion with the Presenters)

Session VIII: Closing

- **CIA 2007 Best Paper Award Giving**
- **Closing of the CIA 2007 Workshop**
- **Announcement of CIA 2008**

SOCIAL PROGRAM

Wednesday, September 19, 2007

19:00 - 21:30

Welcome Reception

In the restaurant "Brasserie Blauw" of the TU Delft Aula Congress Center

Thursday, September 20, 2007

14:00 - 23:00

We begin our tour with a short 10 minutes walk to "de Porceleynse Fles".

(1) Visit to the Royal Delft Porcelain Factory

Royal Delft is the last remaining Delftware factory from the 17th century still producing entirely handmade Delftware. We make a guided tour through the impressive inner garden and the historical exposition rooms which atmosphere will bring you back to our century old history. You will be able to see our painters at work and in the factory you can see the workers occupied with their



daily activities. Admire the antique piece in the museum and continue your way to our showroom where you will find the complete collection of hand-painted earthenware.



If you feel inspired, you may even design and order your own Royal Delft Blue porcelain plate just in case you might need one for whatsoever purpose ... ☺

(2) Guided round trip through Delft city on its canals by boat

After our visit to the Royal Delft porcelain factory, the private DelftXpress tram takes us to "Het Karrewiel" where we will enter a guided round-trip boat which takes us through the Delft canals to a stop near the Vermeer centre (5 minutes walking). The boat trip will take about 40 minutes.

(3) Visit to the Vermeer Centre

Johannes Vermeer is one of the best known artists from the Dutch Golden Age. His name is inextricably linked with Delft, the city in which he was born in 1632 and where he lived and worked all his life.

The Vermeer Centre offers a visual voyage of discovery through the life, work and city of Johannes Vermeer.

Though there are, unfortunately, not one original Vermeer paintings shown in the Vermeer Centre, you might enjoy the little journey back in time when being told about the master himself, his life, his paintings, the way of their creation, and the 17th century he lived in.



From the Vermeer centre, we will walk a few minutes to the restaurant De Nonnerie at the St. Agatheplein.

(4) Social Dinner at "De Prinsenkelder" (De Nonnerie)

The "Prinsenkelder" restaurant has been situated since 1948 in the arched cellar under the "Prinsenhof" which is located in the centre of Delft.

The location has a long history. Around 1400 the cellar which lay under the refectory - the common dining hall - was the storage cellar for food and supplies belonging to the nuns of the third order of St. Franciscus whose patroness saint was St. Agatha.

Willem of Orange, the founder of the Netherlands was murdered by Balthasar Geraerts in the Prinsenhof on his way to the refectory.



The menu is French/Dutch. So, we hope that you very much enjoy our social dinner and relax from your hard working at this historic, though admittedly somewhat tragic, but comfy place!

Not keeping with tradition but due to the short distances from De Nonnerie to hotels within the city centre there will be no shuttle at the end of the social program back to selected hotels.

Invited Talks & Speakers

Wednesday, September 19, 2007, 9:00 - 9:45

Managing Sensors and Information Sources Using Semantic Matchmaking and Argumentation

Alun Preece (University of Aberdeen, UK)

Effective deployment and utilisation of limited and constrained intelligence resources - including sensors and other sources - is seen as a key issue in modern multinational coalition operations. In this talk, I will examine the application of semantic matchmaking and argumentation technologies to the management of these resources. I will show how ontologies and reasoning can be used to assign sensors and sources to meet the needs of missions, and show how argumentation can support the process of gathering and reasoning about uncertain evidence obtained from sensor probes.



Alun Preece was born in [Cardiff](#) and spent the first 24 years of his life in Wales. He obtained my BSc and PhD in computer science from [Swansea](#), after which he spent five post-doctoral years in Canada (at [Concordia University](#), Montréal) and France (at the [University of Savoie](#), Chambéry). He returned to the UK as a lecturer at [Aberdeen](#) in 1994, where he is currently a Professor in [Computing Science](#). In autumn 2007 he will return to his home city, to take up the chair in [Knowledge and Information Systems](#) at [Cardiff University](#). Alun's current research activities are focused on techniques for the development of intelligent Web services and distributed knowledge-based systems. These require a fusion of aspects of agent technology (particularly communication, resource identification, and coalition formation), knowledge technology

(particularly ontologies, problem-solving, and information quality), and distributed computing technology (particularly Web and Grid standards). Application domains include e-science, e-commerce, e-response, and industrial knowledge management. He is Principal Investigator of the [International Technology Alliance in Network and Information Sciences](#) and [Qurator](#) projects at Aberdeen, and a Co-Investigator on the [PolicyGrid](#) Research Node of the [National Centre for e-Social Science](#). Alun is the author of over 130 [publications](#). Alun has been a committee member for the British Computer Society's [Specialist Group on Artificial Intelligence](#) since 1999, and closely involved in the organisation of SGAI's [long-running conference series](#) since 2000. Alun serves on the editorial boards of [IEEE Intelligent Systems](#), the [Knowledge Engineering Review](#), and [Knowledge and Information Systems](#).

Wednesday, September 19, 2007, 14:00 - 14:45

A Delegation Framework Applied to Aerial Robotic Scenarios.

John Jules Meyer (University of Utrecht, The Netherlands)

The concept of delegation is central to an understanding of the interactions between agents in cooperative agent problem-solving contexts. In fact, the concept of delegation offers a means for studying the formal connections between mixed-initiative problem-solving, adjustable autonomy and cooperative agent goal achievement. In this paper, we present an exploratory study of the delegation concept grounded in the context of a relatively complex multi-platform Unmanned Aerial Vehicle (UAV) catastrophe assistance scenario, where UAVs must cooperatively scan a geographic region for injured persons. We first present the scenario as a case study, showing how it is instantiated with actual UAV platforms and what a real mission implies in terms of pragmatics. We then take a step back and present a formal theory of delegation based on the use of 2APL and KARO. We then return to the scenario and use the new theory of delegation to formally specify many of the communicative interactions related to delegation used in achieving the goal of cooperative UAV scanning. The development of theory and its empirical evaluation is integrated from the start in order to ensure that the gap between this evolving theory of delegation and its actual use remains closely synchronized as the research progresses. The results presented here may be considered a first iteration of the theory and ideas.



John-Jules Meyer is professor of computer science at the University of Utrecht (The Netherlands) where he is heading the intelligent systems group. Contact him at jj@cs.uu.nl

Thursday, September 20, 2007, 9:00 - 9:45

Analysis of Negotiation Dynamics.

Catholijn Jonker (TU Delft, The Netherlands)

The process of reaching an agreement in a bilateral negotiation to a large extent determines that agreement. The tactics of proposing an offer and the perception of offers made by the other party determine how both parties engage each other and, as a consequence, the kind of agreement they will establish. It thus is important to gain a better understanding of the tactics and potential other factors that play a role in shaping that process. A negotiation, however, is typically judged by the efficiency of the outcome. The process of reaching an outcome has received less attention in literature and the analysis of the negotiation process is typically not as rigorous nor is it based on formal tools. Here we present an outline of a formal toolbox to analyze and study the dynamics of negotiation based on an analysis of the types of moves parties to a negotiation can make while exchanging offers. This toolbox can be used to study both the performance of human negotiators as well as automated negotiation systems.



Catholijn Jonker (1967) is full professor of Man-Machine Interaction at the Faculty of Electrical Engineering, Mathematics and Computer Science of the Delft University of Technology. She studied computer science, and did her PhD studies at Utrecht University. After a post-doc position in Bern, Switzerland, she became an assistant (later associate) professor at the Department of Artificial Intelligence of the Vrije Universiteit Amsterdam. From September 2004 until September 2006 she was a full professor of Artificial Intelligence / Cognitive Science at the Nijmegen Institute of Cognition and Information of the Radboud University Nijmegen. She chaired De Jong Akademie (Young Akademie) of the KNAW (The Royal Netherlands Society of Arts and Sciences) in 2005 and 2006, and she is a member of the same organisation from 2005 through 2010. Her recent publications address cognitive processes and concepts such as trust, negotiation, and the dynamics of individual agents and organisations. In Delft she works with an interdisciplinary team to engineer human experience through multi-modal interaction between natural and artificial actors in a social dynamic context.

Friday, September 21, 2007, 9:30 - 10:15

The Games Between Agents and Ants.

Jaap van den Herik (U Maastricht, The Netherlands)

In this talk, we compare state-of-the-art multi-agent reinforcement learning algorithms in a wide variety of games. We consider two types of algorithms: value iteration and policy iteration. Four characteristics are studied: initial conditions, parameter settings, convergence speed, and local versus global convergence. Global convergence is still difficult to achieve in practice, despite existing theoretical guarantees. Multiple visualizations are included to provide a comprehensive insight into the learning dynamics.



Jaap van den Herik (born 1947) received his doctoral (M.Sc.) in Applied Mathematics from the Vrije Universiteit (VU) in Amsterdam (1974 - cum laude). He continued to work at the VU as researcher for one year. In 1975 he became Assistant Professor at the Delft University of Technology (DUT). In 1983, he received his doctorate (Ph.D.) from DUT on the thesis "*Computer Chess, the Chess World and Artificial Intelligence*" (published in Dutch). The second semester of 1984 Van den Herik, on invitation, took up a visiting professorial post at the McGill University, Montreal, Canada. He is a co-founder of the [NVKI](#) (Nederlandse Vereniging voor Kunstmatige Intelligentie), the Dutch Association for Artificial Intelligence. He has been President of the NVKI from 1990 till 1995. Currently he is Editor of the *NVKI-Newsletter*. Together with some others, Prof. dr. Max Euwe among them, he founded the CSVN, the *Dutch Computer Chess Association* (1980).

Since 1983 he has been the Editor-in-Chief of the *Journal of the International Computer Chess Association* ([ICGA Journal](#)), one of the 400 journals accepted by the Institute for Scientific Information as scientific source for the CompuMath Citation Index. In 1987, Van den Herik was appointed to the Universiteit Maastricht. Besides being Full Professor in Computer Science at the Universiteit Maastricht he holds a named professorial chair (LUF professorship) from the University of Leiden, Department of Law, with specialization Computer and Law since 1988. He was President of JURIX, the Foundation for Legal Knowledge-Based Systems from 1991 - 1999.

Van den Herik has been the enthusiastic leader of several programme and organizing committees such as the AIT '89 (Artificial Intelligence Application Conference) in the Hague, AI and Simulation Conference (1989) in Rome, NAIC '90 in Kerkrade, Limburg, the 3rd Computer Games Conference and Olympiad (1991) in Maastricht, the 7th Advances in Computer Chess Conference (1993) in Maastricht, ECAI '94 (the 11th European Conference on Artificial Intelligence) in Amsterdam, the JURIX Conference in Maastricht (1995), the 8th Advances in Computer Chess Conference in Maastricht (1996), and the 6th Benelearn Conference in Maastricht (1996).

In 1991 he was ACM's honoured guest in Albuquerque NM.

In November 1991 he was appointed Scientific Director of the Foundation for Knowledge Based Systems (Stichting Knowledge Based Systems) in Rotterdam. From April 1994 till December 1995, Van den Herik was Dean of the Faculty of General Sciences of the University of Limburg. In January 1995, he was appointed as Scientific Director of the Maastricht Research Institute for Knowledge Based Systems (MATRIKS) and Director of RIKS (Research Institute for Knowledge based Systems). This appointment ended in December 1995.

From 1995 till 2000 Van Den Herik gave further impulses to developments in the field of AgentTechnology and Neural Networks. In 1998 he established the Institute of Knowledge and AgentTechnology (IKAT).

For these efforts the NVKI rewarded him with an honorary membership in 1998. In 1999 the foundation JURIX appointed him as honorary president. In the same year Van den Herik was program chair of the JURIX'99 conference. Other worth mentioning activities are: Tournament director of several World Championships in Computer Chess, and initiator together with Dr. H. Iida of the series International Conference on Computer and Games. The latest project he started with Dr. E.O. Postma investigates if and how computers can act as art experts. The scientific question is whether computers are better in recognizing the authenticity of a painting than humans.

Awards

CIA 2007 Best Paper Award



The CIA 2006 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 21, 2007, 16:45

CIA 2007 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 20, 12:00 - 13:00 in the demonstration session (Session V).

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 20, in the evening.

Previous winners of the CIA Best Paper Award:

2006 (LNAI 4149)

"Learning to Negotiate Optimally in Non-Stationary Environments"
Vidya Narayanan, Nicholas R. Jennings (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, 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:

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 "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 2007 workshop:

- Philip Hendrix (Harvard University, USA)
- Avi Rosenfeld (Bar Ilan University, Israel).

These grants were sponsored by IEEE FIPA.

Further, there have been a limited number of free registrations sponsored by the Dutch Research School for Information and Knowledge Systems SIKS. These were awarded to following Dutch students:

- Mattijs Ghijsen
- Nieske Vergunst
- Bas Steunebrink
- Valentin Robu
- Chetan Yadati Narasimha.

Organisation

Co-Chairs



Matthias Klusch is a Senior Researcher and distinguished Research Fellow of the German research centre for Artificial Intelligence (DFKI) where he is heading a research team on intelligent information systems and agents.

He received both his MSc (1992) and PhD (1997) in computer science from the Christian-Albrecht University of Kiel (Germany).

Dr. Klusch founded the German conference series on multi-agent system technologies (MATES) in 2003, the annual international workshop series on cooperative information agents in 1997, and the European AgentLink special interest group on intelligent information agents from 1998 to 2004. He has been program co-chair of the Intl IEEE conference on Intelligent Agent Technology (IAT) in 2006, and 2007, the Intl Semantic Web conference (ISWC) in 2007, and Web Intelligence (WI) in 2005 and 2008. He serves on the program committee of international conferences in the fields of knowledge and information systems, agent technology, and the semantic Web.

He is on the editorial board of the international journals of Cooperative Information Systems; Knowledge and Information Systems; Web Intelligence and Agent Systems; Web Semantics; and Semantic Web and Information Systems.

His research interests include agent-based, service-oriented and semantic computing, distributed rational decision-making, and quantum information processing. He is member of the IEEE Computer Society, ACM, and German Society for Informatics.

Contact him at klusch@dfki.de; <http://www.dfki.de/~klusch>



Koen Hindriks is an assistant professor at the Faculty of Electrical Engineering, Mathematics and Computer Science of the Delft University of Technology. He studied computing science at the University of Groningen, and got a PhD degree from Utrecht University in Artificial Intelligence. He has been a consultant at Accenture for four years. In 2005 he became assistant professor at the Artificial Intelligence group of the Radboud University of Nijmegen. His main research interests include agent programming, rational agents and negotiation.

Contact him at k.v.hindriks@tudelft.nl



Leon Sterling is Professor of Software Innovation and Engineering in the Department of Computer Science and Software Engineering at the University of Melbourne.

He received a BSc(Hons) from the University of Melbourne in 1976 and a PhD in Pure Mathematics from the Australian National University in 1981. He has worked in universities in the UK, Israel and USA. His teaching and research specialities are software engineering, logic programming, especially the language Prolog, and artificial intelligence. He consults widely to industry and has served on several boards representing Software Engineering.

Contact him at

<http://www.soe.unimelb.edu.au/Content.aspx?topicID=437>



Mike P. Papazoglou holds the chair of Computer Science and is director of the INFOLAB at the Univ. of Tilburg in the Netherlands. He is also an honorary professor at the University of Trento in Italy. Prior to this he was full Professor and head of School of Information Systems at the Queensland Univ. of Technology (QUT) in Brisbane Australia (1991-1996). He also held senior academic positions at the Australian National University, University of Koblenz, Germany, Fern Universitaet Hagen, Germany, and was principal research scientist at the National German Research Centre for Computer Science (GMD) in St. Augustin from (1983-1989).

Papazoglou serves on several international committees and on the editorial board of nine international scientific journals and is co-editor in charge of the MIT book series on Information Systems. He has chaired numerous well-known international scientific conferences in Computer Science. These include the Int.l Conf. on Data Engineering (ICDE), Int.l Conf. on Distributed Computing Systems (ICDCS), Int.l Conf. on Digital Libraries (ICDL), Int.l Conf. on Cooperative Information Systems (CoopIS), Int.l Conf. on Entity/Relationship Modelling and others. He is the founder of the Int.l Conf. on Cooperative Information Systems (CoopIS) and more recently of the Int.l Conf. on Service Oriented Computing (ICSOC).

Papazoglou has authored/edited fifteen books and approximately hundred and fifty scientific journal articles and refereed conference papers. His most two recent books are "[e-Business: Organizational and Technical Foundations](#)" published by J. Wiley 2006, and "Principles and Foundations of Web Services: An Holistic View" to be published by Addison-Wesley in mid 2006.

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FIPA is an IEEE Computer Society standards organization that promotes agent-based technology and the interoperability of its standards with other technologies. FIPA was originally formed as a Swiss based organization in 1996 to produce software standards specifications for heterogeneous and interacting agents and agent based systems. Since its foundations, FIPA has played a crucial role in the development of agents standards and has promoted a number of initiatives and events that contributed to the development and uptake of agent technology. Furthermore, many of the ideas originated and developed in FIPA are now coming into sharp focus in new generations of Web/Internet technology and related specifications. In March 2005, the FIPA Board of Directors presented this opportunity to the entire FIPA membership, who unanimously voted to join the IEEE computer Society. Now, it is time to move standards for agents and agent-based systems into the wider context of software development. In short, agent technology needs to work and integrate with non-agent technologies. To this end, the IEEE Computer Society has formally accepted FIPA to become part of its family of standards committees. www.fipa.org



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