Sixth International Workshop CIA 2002

COOPERATIVE

INFORMATION AGENTS

September 18 - 20, 2002, Madrid, Spain
Universidad Rey Juan Carlos

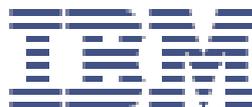Location: C\ Tulipán, s/n, Móstoles 28933, ESCET School of Engineering, Aulario I, Sala 003

Program & Social Events

Invited Talks & Speakers

Organisers & Sponsors

SOCIAL EVENTS

CIA+ESAW 2002 JOINT RECEPTION

Location:
Madrid Town Hall
Patio de Cristales, Primera Casa Consistorial
Plaza de la Villa 6
28013 Madrid, Spain

❖ Welcome by Mr. Carlos Martínez Serrano,
   Spanish Councillor for New Technologies
❖ Cocktails

Plaza de la Villa

Wednesday, September 18, 19:00 - 20:00
CIA 2002 WELCOME RECEPTION

Location:
Universidad Rey Juan Carlos,
School of Engineering,
Campus de Móstoles, Cafeteria

❖ Welcome by Professor David
   Ríos Insua, URJC Vice-Rector of
   International Relations and New
   Technologies
❖ Snacks and Beverages

Thursday, September 19, 15:15 - 23:00
CIA 2002 SOCIAL PROGRAM

❖ Visit to Bodegas González in Camarena
❖ Guided visit to the historic centre of Toledo
❖ Social Dinner at the "Parador de Toledo"

PROGRAM

Wednesday, September 18

9:30   Registration & Welcome

10:00 - 11:00   **Invited Talk**

                    Intelligent Interfaces for Information Agents:
                    Systems, Experiences, Future Challenges
                    Kenji Mase (ATR Media Information Science Labs, Japan)

11:00 - 11:30   *Coffee Break*

Session 1
Information Agents for Mobile Computing Environments
Chair: Onn Shehory
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11:30 - 12:00   **Tourists on the Move**
                    M. Laukkanen, H. Helin, H. Laamanen (Finland)

12:00 - 12:30   **An Agent-based Approach for Helping Users of Hand-Held**
                    Devices to Browse Software Catalogues
                    E. Mena, J.A. Royo, A. Illaramendi, A. Goni (Spain)

12:30 - 13:00   **Large Scale Peer-to-peer Experiments with Virtual Private**
                    Community (VPC) Framework
                    T. Iwao, M. Okada, K. Kawashima, S. Matsumura, H. Kanda,
                    S. Sakamoto, T. Kainuma, M. Amamiya (Japan)

13:00 - 14:30   *Lunch Break*

Session 2
Issues of Interaction and Negotiation
Chair: Sascha Ossowski

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14:30 - 14:45	**A Cognitive Architecture for the Design of an Interaction Agent** A. Garcia-Serrano, J. Calle-Gomez (Spain)
14:45 - 15:15	**A Multi-Agent Reflective Architecture for User Assistance and its Application to E-Commerce** A. Di Stefano, G. Pappalardo, C. Santoro, E. Tramontana (Italy)
15:15 - 15:30	**Curious Negotiator** S. Simoff, J. Debenham (Australia)
15:30 - 16:00	**Measuring Behavior-based Trust Between Negotiating Agents** M. Grimsley, A. Meehan (UK)
16:00 - 16:30	*Coffee Break*
16:30 - 17:30	**Invited Talk** **Electronic Institutions: Future Trends and Challenges** Carles Sierra and Pablo Noriega (Spanish Research Institute for Artificial Intelligence, Spain)
17:30 - 18:00	**Q&A Session: Open discussion on presentations of the day**

19:00 - 20:00 CIA 2002 WELCOME RECEPTION

Location:
Universidad Rey Juan Carlos
School of Engineering,
Campus de Móstoles, Cafeteria

❖ Welcome by Professor David Ríos Insua, Vice-Rector of International Relations and New Technologies
❖ Snacks and Beverages

Thursday, September 19

9:30 - 10:30   Invited Talk

Agents, Crawlers and Web Retrieval
Ricardo Baeza-Yates
(Universidad de Chile, Santiago, Chile)

10:30 - 11:00   *Coffee Break*

Session 3
Information Gathering and Collaborative Filtering
Chair: Matthias Klusch

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11:00 - 11:30   **Acquiring an Optimal Amount of Information for Choosing from Alternatives**
R. Azoulay-Schwartz, S. Kraus (Israel)

11:30 - 12:00   **A Competitive Information Recommendation System and Its Behavior**
Y. Kitamura, T. Sakamoto, S. Tatsumi (Japan)

12:00 - 12:30   **Agents that Model and Learn user Interests for Dynamic Collaborative Filtering**
G. Uchyigit, K. Clark (UK)

12:30 - 13:00   **Opinion-Based Filtering Through Trust**
M. Montaner, B. Lopez, J.L. de la Rosa (Spain)

13:00 - 13:15   **Exchanging and Combining Temporal Information in a Cooperative Environment**
M. Hadad, S. Kraus (Israel, USA)

13:15 - 14:15   *Lunch Break*

Session 4
System Demonstrations (CIA 2002 System Innovation Award Nominees)
Chair: Sascha Ossowski

14:15 – 14:30   Nominee 1
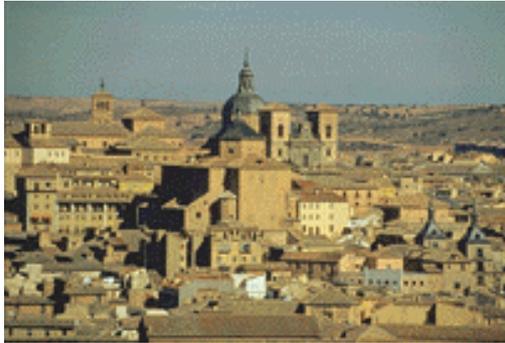**14:30 – 14:45**   Nominee 2
14:45 – 15:00   Nominee 3

15:15   Shuttle leaves from the university to the city of Toledo.
                         On the way, visit to Bodegas González in Camarena.

Toledo, one of the five provinces which go to make up the Comunidad Autónoma de Castilla-La Mancha (Castile-La Mancha Regional Authority), is situated about 75 km south of Madrid.

The historic city of Toledo Spain is declared a world heritage site by UNESCO, and by the Spanish authorities a monumental city, a historic-artistic ensemble. Toledo is a medieval city of narrow winding streets that sits on a small hill and is enclosed on three sides by the river Tajo. Successively a Roman municipium, the capital of the Visigothic kingdom, a fortress of the Emirate of Cordoba, an outpost of the Christian kingdoms fighting the Moors and, in the 16th century, the temporary seat of the supreme power under Charles V, Toledo is the keeper of more than two millennia of history. Its masterpieces are the product of heterogeneous civilizations in an environment where the existence of three major religions, Judaism, Christianity and Islam, was a major facto. According to the local authorities Toledo is a city best to be explored on foot following itineraries that lead to the artistic and cultural high spots. Thus, we are offering you an exclusively guided 2-hours walking tour through the historic centre.

16:45 - 19:00   Guided walking tour through Toledo historic centre
                         Visit to the Cathedral, Sto. Tomé and Sta. María;
                         Refreshment break.

Brief history of Toledo: Roman civilization, which held sway over Toledo from 192 B.C., left its imprint on the city, an imprint still visible in the remains of the walls, the foundations of certain buildings and on the outskirts, where an ancient Roman Circus, as yet unexcavated, has been located. After its conquest midway through the 6th century by the Visigoth Leovigildo, it became the designated capital of his kingdom until the arrival of the Moors, who made themselves masters of the city in the year 711. The struggle waged by the monarchs of Castile to oust the Moors from the territories they had conquered on the Iberian peninsula culminated in King Alfonso VI capturing Toledo in 1085; thenceforth, three ethnically distinct communities were to live together in the city on the Tagus - Christians, Jews and Moslems. This tolerant cohabitation, which lasted into the Middle Ages, was to leave a profound mark such as in the form of the Toledo School of Translators (Escuela de Traductores de Toledo). In contrast to the climate of confrontation and intolerance experienced throughout most of Spain during the Era of Re-conquest, Toledo was for a long time the meeting point for scientists, philosophers, poets and artists of widely differing backgrounds. The expulsion of the Jews from Spain, decreed by the Catholic Monarchs in 1492, heralded the political and economic demise of the city, which culminated in the Royal Court being moved to Madrid in 1561 in the reign of King Philip II. Yet while Toledo lost its title of capital, this actually made it possible for the historical heritage of so many centuries of splendour to be conserved almost intact within the city walls. It was this atmosphere of antiquity spiced with the oriental and a hint of something mysterious, an atmosphere maintained down to the present, that attracted the artist El Greco, and, in the latter half of the 16th century during Spain's Golden Age (Siglo de Oro), came to inspire numerous literary works and enlighten the pen of the epoch's leading romantic poets and writers.

19:00   Shuttle leaves to Parador de Toledo

19:20   **Appetisers on the terrace of the "Parador de Toledo"**

Located on the Cerro del Emperador by a meander of the river Tagus, the prestigious 4-star hotel "Parador de Toledo" offers an incomparable panoramic view of the monumental profile of Toledo, with its most precious jewels, such as the cathedral, the fortress Alcázar and the synagogues.
Served appetisers: Selection of Spanish Tapas (Spanish omelette, smoked fish canapé, etc.), wine of the region, dry sherry, beer, etc.

20:00 - 22:00   **Social Dinner at the "Parador de Toledo"**

For the CIA 2002 social dinner typical dishes and wine from the Ribera del Duero region are offered in the dining room of the Parador de Toledo. We'd like to very cordially invite you to relax from your hard work of the day at this selected place and hope that you will enjoy our common dinner. ¡Que aproveche!

Matthias, Sascha, and Onn

22:00 - 23:00   Shuttle returns to Madrid city centre and hotels

Friday, September 20

9:30 - 10:30   Invited Talk

Making Peer Databases Interact - A Vision for an
Architecture Supporting Data Coordination
Fausto Giunchiglia
(University of Trento, Italy)

10:30 - 11:00   *Coffee Break*

Session 5
Agent-Based Information and Knowledge Management
Chair: Matthias Klusch

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11:00 - 11:30   Data Models and Languages for Agent-Based
Textual Information Dissemination
M. Koubarakis, C. Tryfonopoulos, P. Raftopoulou,
T. Koutris (Greece)

11:30 - 11:45   Integrating Distributed Information Sources with CARROT II
R.S. Cost, S. Kallurkar, H. Majithia, C. Nicholas, Y. Shi (USA)

11:45 - 12:15   Distributed Artificial Intelligence for Distributed
Corporate Knowledge Management
F. Gandon, R. Dieng-Kuntz (France)

12:15 - 12:30   Integrating Information Gathering and Problem-Solving
in Open Environments
S. Macho-Gonzalez, B. Faltings (Switzerland)

12:30 - 13:00   Supporting Virtual Organisations using BDI Agents and
Constraints
S. Chalmers, P.M.D. Gray, A. Preece (UK)

13:00 - 14:30   *Lunch Break*

Session 6
Issues of Agent Communication and Cooperation
Chair: Onn Shehory

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14:30 - 14:45   **An Approach to Agent Communication Based on Organisational Roles**
J.M. Serrano, S. Ossowski (Spain)

14:45 - 15:15   **Exploiting Partially Shared Ontologies for Multi-Agent Communication**
H. Stuckenschmidt (The Netherlands)

15:15 - 15:45   **Evaluation of Distributed and Centralized Agent Location Mechanisms**
D. Ben-Ami, O. Shehory (Israel)

16:00 - 16:30   *Coffee Break*

Session 7
Issues of Information Agent Mobility
Chair: Sascha Ossowski

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16:30 - 16:45   **Programming Agent Mobility**
R. Montanari, G. Tonti, C. Stefanelli (Italy)

16:45 - 17:15   **A Method for Protecting Mobile Agents against Denial of Service Attacks**
B. Cubaleska, M. Schneider (Germany)

17:15 - 17:30   **Threshold Route Optimization Algorithm for Information Retrieving Mobile Agents**
R. Morawek (Austria)

17:30 - 18:00   **Q&A Session: Open discussion on presentations of the day**

Session 8
Closing of the Workshop
Chairs: Matthias Klusch, Sascha Ossowski, Onn Shehory

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18:00 – 18:30   **Workshop Results, Facts & Acknowledgments**
CIA Best Paper Award 2002
CIA System Innovation Award 2002
Announcement of CIA 2003

Invited Talks & Speakers

Intelligent Interfaces for Information Agents: Systems, Experiences, Future Challenges

The key issues of intelligent interfaces for information agents, such as ''context awareness,'' ''personalization,'' ''multi-modality,'' and ''embodiment'' are discussed with several examples of research prototype systems. We investigate various intelligent interfaces and present the design detail of the interface prototypes which are developed for the purpose of multi-modal interaction and communication.
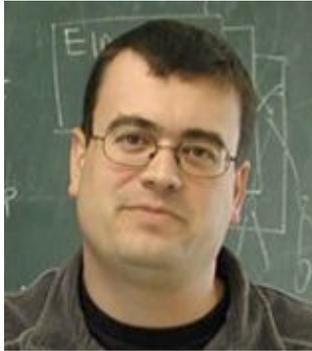
Kenji Mase
Group Leader, Department 1
ATR Media Information Science Laboratories
Seika-cho, Soraku-gun, Kyoto 619-02 JAPAN
phone: 81-774-95-1440, fax: 81-774-95-1408
e-mail: mase @atr.co.jp

Kenji Mase received the B.S. degree in Electrical Engineering and the M.S. and Ph.D. degrees in Information Engineering from Nagoya University in 1979, 1981 and 1992 respectively. He has been with ATR (Advanced Telecommunications Research Institute) since 1995. He is currently the group leader of Department 1, ATR Media Information Science Laboratories. He is also a professor of Nagoya University since August 2002. He joined the Nippon Telegraph and Telephone Corporation (NTT) in 1981 and had been with the NTT Human Interface Laboratories. He was a visiting researcher at the Media Laboratory, MIT in 1988-1989. His research interests include gesture recognition, computer graphics, artificial intelligence and their applications for computer-aided communications. He is a member of the Information Processing Society of Japan (IPSJ), Institutes of Electronics, Information and Communication Engineers (IEICE) of Japan, Virtual Reality Society of Japan, and ACM and a senior member of IEEE Computer Society.

Electronic Institutions: Future Trends and Challenges

Carles Sierra
Institut d'Investigació en Intel.ligència Artificial (IIIA-CSIC)
Campus UAB,08193 Cerdanyola,
Catalonia, Spain
voice: +34-93-580 95 70, fax: +34-93-580 96 61
sierra@iiia.csic.es

Carles Sierra is a researcher at the Spanish Research Institute for Artificial Intelligence (IIIA) of the Spanish Research Council (CSIC) and president of the Catalan Society for Artificial Intelligence (ACIA). He obtained his PhD on computer science from the Technical University of Catalonia in Barcelona (UPC) and currently is part-time professor of the computer science department of the Autonomous University of Barcelona (UAB).

Pablo Noriega
Institut d'Investigació en Intel.ligència Artificial
Consejo Superior de Investigaciones Científicas (CSIC)
Campus U.A.B.; Bellaterra
Catalunya, SPAIN. 08193
Tel. (34-3) 580 9570, FAX. (34-3) 580 9661

Pablo Noriega is a visiting researcher at the Spanish Research Institute for Artificial Intelligence (IIIA) of the Spanish Research Council (CSIC). Professor Noriega is president of Laboratorio Nacional de Informática Avanzada (LANIA) in Xalapa, Mexico (1991-), member of the Education Subcommittee of the International Forum of Actuarial Associations (IFAA) (1995-), and the Mexican Academy of Informatics (1989-). Among other commitments, he was president of the Mexican AI Society (1989-1991), president of the Mexican National College of Actuaries (CONAC) (1991-1993), and chairman of the Mexican Government Task Force on Information Technologies Policy (1992-1995). He obtained his PhD in Computer Science (AI) from the Universitat Autònoma de Barcelona, Spain (1994-97), for his work on "Agent mediated auctions: The Fishmarket Metaphor".

Agents, Crawlers and Web Retrieval

We survey crawlers, a specific type of agents used by search engines, explore the relation with generic agents and how agent technology or variants of it could help to develop search engines that are more effective, efficient and scalable.

Ricardo Baeza-Yates
Depto. de Ciencias de la Computación
Universidad de Chile,
Blanco Encalada 2120,
Santiago 6511224, CHILE.
Telephone: 56-2-689-2736, Fax: 56-2-689-5531
rbaeza@dcc.uchile.cl

Ricardo Baeza-Yates is a Professor and Director of the Center for Web Research at the Department of Computer Science of the Engineering School of the University of Chile in Santiago de Chile. His research interests includes algorithms and data structures, information retrieval, web mining, text and multimedia databases, software and database visualisation, and user interfaces. He obtained the M.Eng. degree on Electronics (Digital Systems) with a thesis on computer graphics, and a Ph.D. from the University of Waterloo, Canada, in 1989 on algorithms for text searching. Among other commitments he was elected president of the Chilean Computer Science Society (SCCC) 1992 – 1994, and currently is the president of CLEI, a Latin American association of CS departments; and co-ordinates the Iberoamerican co-operation program in Electronics and Informatics. He is co-author of the book on Modern Information Retrieval, published in 1999 by Addison-Wesley, as well as co-author of the 2nd edition of the Handbook of Algorithms and Data Structures, Addison-Wesley, 1991; and co-editor of the book on Information Retrieval: Algorithms and Data Structures, Prentice-Hall, 1992, between other publications in journals published by ACM, IEEE or SIAM. He has been visiting professor or invited speaker at several conferences and universities all around the world, as well as referee of many journals, conferences, NSF, etc. He is member of the ACM, AMS, EATCS, IEEE (senior member) & IEEE-CS, SCCC and SIAM.

Making Peer Databases Interact - A Vision for an Architecture Supporting Data Coordination

We study the problem of the interaction among databases in a peer-to-peer (P2P) network. We propose a new approach, that we call *"data (base) coordination"*, that rejects the assumption, made for instance in data integration, that the involved databases act as if they were a single (virtual) database, modeled as a global schema. From an operational point of view, the distinguishing feature of data coordination is that many of the parameters (metadata) influencing the interaction among peer databases are decided at run time. For any given query, the involved databases interact using the most "appropriate" (virtual) schema. This is crucial for dealing with the strong dynamics of a P2P network. We provide four basic architectural notions and hint how they are the building blocks of a possible distributed implementation capable of coordinating databases in a P2P network.

Fausto Giunchiglia
Department of Information and Communication Technology
University of Trento
38050 Povo di Trento, ITALY
and
Istituto per la Ricerca Scientifica e Tecnologica (ITC-IRST)
38050 Povo di Trento, ITALY
Phone: +39 0461 88 15 33 (office) + 39 0461 88 11 46 (secretary)
Fax: +39 0461 88 20 93
fausto@dit.unitn.it

Fausto Giunchiglia is professor of computer science at the University of Trento, Department of Information and Communication Technology and senior consultant at ITC-IRST, Automated Reasoning Systems Division. He has done research in many different but related research areas such as: Artificial Intelligence, Formal Methods, Software Engineering, automated reasoning, theorem proving, model checking, planning, contexts and contextual reasoning (and logics for modeling it), abstract reasoning, metatheoretic reasoning, reasoning about propositional attitudes (belief), integration of reasoning systems, agents and agent oriented software engineering, P2P data bases. Professor Giunchiglia has also contributed to the development of various software systems, in particular, he lead and developed in part the implementation of the GETFOL system, a complete re-implementation of Richard Weyhrauch FOL system. He started and led in the first phase the implementation of the NuSMV model checker, now gone OpenSource. And finally, he has participated in many technology transfer or consulting projects with private companies and public bodies.

Organisers of CIA 2002

Matthias Klusch is senior researcher at the German Research Centre for Artificial Intelligence Ltd. (DFKI GmbH Saarbrücken), and assistant professor at the Free University of Amsterdam, The Netherlands. Formerly, he was assistant professor at the Technical University of Chemnitz, Germany, and visiting research scientist at the Robotics Institute of Carnegie Mellon University in Pittsburgh, USA. He studied Mathematics and Computer Science at the University of Kiel, Germany, from which he received his MSc (1992) and PhD (1997) in Computer Science. Since 1998 he is co-ordinating the European AgentLink SIG on Intelligent Information Agents. Dr. Klusch is founder and general chair of the international workshop series on Cooperative Information Agents (CIA), program co-chair of the international conference on Intelligent Agent Technology IAT 2003, and was local co-chair of the second European Agent Systems Summer School (EASSS 2000). He is on the editorial board of the international journals of Knowledge and Information Systems (KAIS); Cooperative Information Systems (CIS); Web Intelligence and Agent Systems (WIAS); Electronic Transactions on AI (ETAI, Semantic Web area). He is a co/editor of numerous books and co-/authored dozens of papers in the area of software agent technology and intelligent information systems. Member of German Society for Computer Science and IEEE Computer Society. **klusch@dfki.de   www.dfki.de/~klusch/**

Sascha Ossowski is associate professor of Computer Science at the University Rey Juan Carlos in Madrid where he leads the Artificial Intelligence Research Group. 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 Technical University of Madrid in 1997. Prof. Ossowski is holding several research projects focussing on the development of advanced software systems based on Artificial Intelligence and Agent Technology. He has published a monograph and more than 40 research papers on agent co-ordination and communication, and their application to real-world problems such as transportation management, e-commerce or network management. He served as programme committee member for numerous international conferences and workshops, and acted as a scientific adviser in various Spanish research programmes. **sossowski@escet.urjc.es   www.ia.escet.urjc.es/~sossowski/**
Sascha Ossowski is Local Co-Chair of CIA 2002

Onn Shehory is a researcher at the IBM Research Lab in Haifa - the Tel Aviv Site, where his research focuses on agents, and in particular on their role in electronic markets. He is also part of the IBM team that designs and develops solutions for such markets. Onn Shehory was previously a visiting faculty at The Robotics Institute, Carnegie Mellon University, where he was involved in research of theories and applications of multi-agent systems. Onn Shehory received his M.Sc. in Physics and Ph.D. in computer science from Bar Ilan University, Israel. Dr. Shehory has published dozens of papers on agent cooperation, agent architecture, MAS architecture, coalition formation, efficient resource utilization and task allocation in MAS, agent location and trust establishment. He was a member of multiple conference program committees, and plays an active reviewing and editorial role in the agent research community. **onn@il.ibm.com**

Local organisation team at URJC in Madrid:

Holger Billhardt, Alberto Fernández, Vicente Matellán, Ana Pradera, and Juan-Manuel Serrano

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IBM Haifa Research Lab (HRL) is a leading research institute in multiple disciplines of computer science. HRL is the largest non-academic research institute in Israel. The mission of HRL is to perform R&D projects that advance the state of the art, attempting to disseminate new technologies in future IBM or partners products. HRL has, for decades, contributed to the scientific and industrial communities and to the general public as well. This commitment to the community continues via activities such as collaborative research with universities, employment and training of graduate students, support for technological education and others.
Research at HRL spans across multiple fields. Among other areas, the lab performs research and development of web-related technologies, including agents, eBusiness and information retrieval. The lab has a rich experience in web-based applications, agent technology and knowledge management, and was engaged in research projects which have been developed to a prototype level and have influenced products of IBM and its partners. Further details on IBM Haifa Research Labs can be found at http://www.haifa.il.ibm.com/

Whitestein Technologies is a young international IT company, specialized in the design and development of advanced agent-based systems, applications, and technologies, combined and well integrated with other advanced information and communication technologies (eg. mobile wireless computing) and current state-of-the-art technologies (eg. Java J2EE). It was founded in January 1999 with the mission to become a leading provider of advanced software agent technologies, products, solutions, and services for various applications and industries.
We strongly believe that agent-based technologies and agent-oriented software engineering methodologies will be among the key concepts of a next generation of distributed information systems and network infrastructures, in particular in combination with other leading-edge technologies such as web services and mobile wireless computing. However, based on our hands-on experience in the real IT-world, we also know that software agent technologies will only thrive in the marketplace if they reach industry-grade quality and applicability, and are well integrated with "traditional" technologies and products. Consequently, Whitestein pursues a well-focused, integrated and balanced approach on parallel paths in order to realize the agents technologies' potential for better solutions and thus additional customer benefits and profits. Technology Research: academic partnerships and international research projects; systematic exploration and analysis of relevant technologies and

architectures; prototyping and proof of concepts; publishing; contributions to standardization bodies. Technology Development: industrial partnerships and joint ventures; development of conceptual frameworks; development of mostly industry-agnostic (horizontal) technology products and solutions. Technology Application: development of industry-specific (vertical) products and solutions, including the development and integration of customer-specific applications. Technology Consulting: know-how transfer to customers and partners; management consulting and professional support services; training and education; conferences and events. http://www.whitestein.com/

Swiss Life AG established as a mutual in 1857, Swiss Life/Rentenanstalt is Switzerland's first and most successful life insurer, and among the world's largest insurance companies in terms of assets, premium income and life insurance in force. The company is an acknowledged market leader for both individual and group products in the insurance industry. In June 1997, Swiss Life converted into a joint stock company. In the same year, the company received blue-chip status and was accepted into the SMI. The Swiss Life Group includes over 50 insurance companies, consulting groups, and financial service organisations, both in Switzerland and abroad. In 2000, the Group's gross premium income reached a record CHF 19.3 billion. Total assets amounted to CHF 214.4 billion. The Swiss Life Group has approximately 12.481 employees world-wide.

Swiss Life participates with its **IT Research & Development Group** in the project. The group is concerned with developing advanced IT solutions to improve and support business work. The current focus of the group is on Knowledge Management and Data Mining. In both areas it is involved in "real" projects within Swiss Life as well as in research projects with other partners (EU projects "OnToKnowledge" IST-1999-10132 and "Mining Mart: Enabling End-user Data Warehouse Mining", IST-1999-11993; Swiss Project "SMART: Supporting Metadata for Data Warehousing Systems", KTI-Nr. 3979.1). This is in accordance with the group's official mission to bring about half of its resources into real Swiss Life projects while the other half is dedicated to more research-oriented activities. In this way, latest research results are applied within the company where they produce an added value. The research community, on the other hand, gets a feedback about the applicability, weaknesses and strengths of certain approaches. http://www.swisslife.com

AgentLink is Europe's IST-funded Network of Excellence for agent-based computing. As such, AgentLink co-ordinates research and development activities in the area of agent-based computer systems on the behalf of the European Commission. AgentLink supports a range of activities aimed at raising the profile, quality, and industrial relevance of agent systems research and development in Europe. AgentLink divides its activities into four main areas: Industrial action: facilitating technology transfer through a program of industrial meetings, workshops, standardisation updates, and working group. Research co-ordination: promoting excellence in European agent research through support for workshops, special interest groups, and dissemination of research results. Teaching and training: establising agent related skills throughout Europe by support for summer schools and courses. Infrastructure and management: providing an infrastructure through which AgentLink can do its work, including a WWW site, regular newsletter, email list, and an awareness programme. http://www.agentlink.org

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www3.autodesk.com/

With three locations in the Washington, D.C., area, **George Mason University** has emerged in the last decade as a major university in the United States. GMU's innovative programs and visionary outlook have attracted a faculty of renowned scholars and teachers. The university began as the Northern Virginia branch of the University of Virginia in 1957. George Mason University has achieved national distinction in many areas and around 24.000 students enrolled in 1999. **www.gmu.edu**

Asociación Española para la Inteligencia Artificial (AEPIA)
http://aepia.dsic.upv.es/

http://www.urjc.es/

Spanish Ministry for Science and Technology (MCyT)
http://www.mcyt.es/

The CIA 2002 workshop is organised in co-operation with/supported by

French Institute for Research in Computer Science and Control