

Aris M. Ouksel

Management Information Systems and Computer Science

Dept. Of Information and Decision Sciences (M/C 294)

Dept. of Computer Science

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UNIVERSITY DEGREES

Ph. D.	NORTHWESTERN UNIVERSITY, EVANSTON, ILLINOIS. Computer Science.	1985
M.S.	NORTHWESTERN UNIVERSITY, EVANSTON, ILLINOIS. Computer Science.	1980
Engineer	UNIVERSITY OF ALGIERS, ALGERIA. Informatics.	1977

ACADEMIC EXPERIENCE

Associate Professor in Management Information Systems and Computer Science	1995-....
THE UNIVERSITY OF ILLINOIS AT CHICAGO, CHICAGO, ILLINOIS	
Director of the CISORS (Cooperative Info. Syst. And Org Res. and Services) Lab	1995-2010
THE UNIVERSITY OF ILLINOIS AT CHICAGO, CHICAGO, ILLINOIS	
Director of the MIS PhD Program,	1994-1998
THE UNIVERSITY OF ILLINOIS AT CHICAGO, CHICAGO, ILLINOIS	
CBA Director of Information Technology,	1996-1998
THE UNIVERSITY OF ILLINOIS AT CHICAGO, CHICAGO, ILLINOIS	
Assistant Professor of Management Information Systems	1989-1995
THE UNIVERSITY OF ILLINOIS AT CHICAGO, CHICAGO, ILLINOIS	
Assistant Professor of Computer Science	1985-1988
UNIVERSITY OF PETROLEUM AND MINERALS, DHAHRAN, SAUDI ARABIA	
Assistant Professor of Computer Science,	1984-1985
ARIZONA STATE UNIVERSITY, CHICAGO, ILLINOIS	
Teaching and Research Assistant, Computer Science,	1980-1983
NORTHWESTERN UNIVERSITY, EVANSTON, ILLINOIS	
Teaching Assistant, Computer Science,	1975-1976
UNIVERSITY OF ALGIERS, ALGIERS, ALGERIA	

VISITING ACADEMIC POSITIONS (travel, all expenses, honoraria by host institutions)

Visiting Full Professor	June-July 2007, Mai-June 2008
INSTITUT NATIONAL DES SCIENCES APPLIQUEES (INSA), LYON, FRANCE	
Visiting Full Professor	Summers 2001, 2002
ECOLE POLYTECHNIQUE FEDERALE de LAUSANNE (EPFL), SWITZERLAND	
Visiting Senior Research Scientist,	Oct 99-March 2000
GMD-IPSI (GERMAN NATIONAL RESEARCH CENTER), DARMSTADT, GERMANY	
Visiting Full Professor,	Spring 2000 and May 2001,2002,2003
UNIVERSITY OF MODENA AND UNIVERSITY OF BOLOGNA, ITALY	
Visiting Full Professor,	Summer 1999
TILBURG UNIVERSITY, NETHERLANDS	
Visiting Full Professor ,	Spring 1991, July-August 92
KAISERSLAUTERN UNIVERSITY, GERMANY	
Visiting Research Scientist,	1988- 1989
THE UNIVERSITY OF TEXAS AT DALLAS, DALLAS, TEXAS	

INDUSTRIAL EXPERIENCE

Prospero Inc., Founder	2006-
Chicago Alliance of Community Health Centers	2003-2005
Consultant, Member of the advisory board: Integration of Health Information Systems	
3S (Systems/Software/Solutions)	1999-2000
Doculabs (Benchmarking Software Solutions Enterprise Sol.)	
Member of the advisory board	
Chicago Manufacturing Center (US Dept of Commerce)	1994-1995
Information Systems technology advisor to Center	
Ameritech	1995-1999
Developed a situational business gaming model to harness competitive and corporate intelligence to support large account marketing teams (\$20 million and above) in understanding the impact of advanced information and telecommunication technologies on specific corporate clients. Cases included First Chicago/NBD Bank, Ford Corporation, Motorola, Blue Shield/Blue Cross, SEARS, United Airlines, etc..	
Pandolfi, Topolski, Weiss and Co. Lt	1997-
White paper: "Pulling All the Pieces Together: A Study of Financial and Accounting Enterprise-wide Information Systems".	
Metropolitan Water Reclamation District	1996-1997
Information technology strategic planning, business reengineering and selection of an enterprise-wide financial enterprise system.	
The International Center for Health Leadership Development	1997-1998
Member of expert panel on "creating the future through building strategic leadership capacity in nursing" within the program on "Leadership Excellence to Advance Performance in Health Care."	
AT&T	1995-1996
Led an AT&T sponsored project to investigate information technology diffusion in small and medium size businesses.	
Economic Development Commission of the City of Chicago	1994-1995
Member of a team charged with the specific task of assessing the level of information technology and telecommunications utilization by manufacturers in the Chicago area. Co-PI in the team that successfully submitted a proposal to the commerce department to establish the Chicago Manufacturing Center.	
City Of Chicago	1993-1994
Led a team to design strategic information systems plans at the Building Department. Assessed the scope of technology application and computer-based integration at small- and medium-sized manufacturers in Chicago. Consulted on applying technology to reengineer manufacturing plants. Evaluated the impact of technology on product/cost quality at several small, medium, size and large firms in the Chicagoland area, including Western Consolidated Technologies, Trendler, Ability Metals, Tab Chemicals, etc...	
Rush Presbyterian Hospital	1994-....
Designed a hospital information infrastructure to provide seamless integration between existing information systems.	
International Information and Trading Services	1986-1988
Designed a retrieval system to provide financial, operational, and managerial information on businesses in the eastern region of Saudi Arabia.	
U.S. Department of the Interior, U.S. Bureau of Reclamation	1984-1985
Designed a database, which incorporates information on land resources and monitors activities taking place in these lands.	
Motorola	1983-1984
Consultant, database and algorithm design.	

RESEARCH INTERESTS

Database and Knowledge Management, Peer-to-Peer and Grid Computing, Mobile Ad-hoc Networks, Mobile Sensor Networks, Semantic Web and Web Services, Inter-Organizational Information Systems, Organizational Learning and Performance, Electronic Commerce and Business gaming, Business Intelligence and Information Economics, Self-Organizing Complex Systems, Publish/Subscribe Systems, Vehicle-to-Vehicle Interaction Systems.

TEACHING EXPERIENCE

Distributed Computing and Systems, Advanced Database and Knowledge Management, Enterprise Components and Web Services, E-Business and Electronic Commerce, Information Technology Strategic Planning, Multi-Agent Systems, Advanced Systems Design and Analysis, Analysis of Algorithms and Data Structures, Game Theory and its Applications to E-Commerce, Dynamics of Complex Systems.

- At UIC, responsible for the design and content development of several courses in the MS-MIS program, including IDS509 (Object-Oriented Systems Analysis and Design), IDS513 (Enterprise Components and Web Services), IDS517 (Enterprise Systems), IDS520 (Distributed Computing and Systems), and IDS521 (Advanced Data Management). I have taught IDS509, IDS520 and IDS521 since their inception in the MS-MIS program. Taught also special topics courses on “Game Theory and Its Applications to E-Commerce, and a course on: “IT and Economics of Urban Transportation” for IGERT students, a joint program IDS/CS.
- Taught E-Business and Electronic Commerce successfully in the MBA program, and also the Chinese MBA program, and given week-long tutorials, multiple times, on the same topic at the University of Modena and University of Bologna in Italy and Lulea University in Sweden.
- Taught IDS355, “Introduction to Operations Management,” since 2008. This is an undergraduate course required of all the business majors. Labs are an important part of this course. I have redesigned the lab manual for this course to adapt to the new changes in IT.

ADMINISTRATIVE EXPERIENCE

Founded CMITT (Center for the Management of Information Technology and Telecommunications.), **96-98**.

Hired the personnel; Designed the organizational structure; Devised strategic plans: Created several services such as the CBA helpdesk; Initiated projects, executive courses and seminars with the business community; Wrote the budget requirements for Information Technology; Participated in the Accreditation (AACSB) task force as the technology expert; Wrote the technology plans for AACSB

FUNDED PROPOSALS

- 1- “Cap-and-Trade Policies for Resource Management in Vehicular Networks and Other Applications,” (PI), UIC-CBA, 2011-2013, \$360K.
- 2- “Context-Driven Management of Heterogeneous Sensor Networks in Hazardous, Surveillance, and Traffic Environments”, (co-PI), NSF, \$2,000,000, 2009-2014.1,895,595.

- 3- "Resource Management amongst Autonomous Command Centers in Mobile Environments", (PI), NSF, \$165,000. 2008-2009.
- 4- "IGERT: Graduate Program in Computational Transportation Science", (co-PI), NSF, \$3,097,976. 2006-2011.
- 5- "Context-Aware Computing with Applications to Public Health Management", (co-PI), NSF, \$2,000,000. 2003-2008.
- 6- "IT Strategic Planning: Development of a situational business gaming model: the case of Ford, United Airlines, the Health care industry, and the Banking industry" (sole PI), Ameritech, \$110,000.00, 1997.
- 7- "Development of a Situational Business Gaming Model. The cases of Ford Corporation, Blue Shield/Blue Cross, and Sears Corp.", (sole PI), Ameritech, \$60,400.00 1996.
- 8- "Development of a Certificate Program in Telecommunications", (sole PI), CBA2000, \$11,200.00, 1996.
- 9- "Information Technology Diffusion in Minority and Female-owned Businesses", (sole PI), AT&T, \$60,000.00, 1995.
- 10- "Design and Implementation of Medical Decision and Clinical Information Systems" (co-PI), Campus Research Board and College of Medicine, \$25,000.00, 1995.
- 11- "Information Technology Diffusion in Minority- Female-owned Businesses" (sole PI), Great Cities, \$8,000.00, 1995.
- 12- "IT Strategic Planning: Enterprise Modeling" (sole PI), City of Chicago, \$88,000.00, 1995.
- 13- "Information Technology Adoption, Utilization and Diffusion in the Chicago-Area Minority and Female-owned Businesses" (sole PI), CBA2000, \$3,000.00, 1995.
- 14- "International Business Development," (sole PI) Illinois Dept Commerce & Community Affairs (DCCA), \$10,000, 1994.
- 15- "Transaction Management in Interpolation-Based Grid Files" (sole PI), US National Science Foundation (NSF), \$64,000, Duration Aug '90- Jan '93.
- 16- "Query Processing in Database Systems", University of Illinois at Chicago, Campus Research Board, Summer Fellowship, \$2,000.
- 17- "Heterogeneous Information Systems" (sole PI) a CBA 2000 award by the College of Business Administration at the University of Illinois at Chicago, \$3,000.
- 18- "Semantic Communication Protocols in Heterogeneous Database Systems", UIC Foreign Travel award, 1993.
- 19- "Cooperation in Heterogeneous Information Systems", NSF travels expenses for graduate students, 1993.
- 20- "A Speech Understanding Approach to Radar Signature Recognition" (sole PI), the Saudi Arabian National Center for Scientific Research, 200,000SR (Saudi Riyal), Duration 1986-1988.

PATENTS (submitted by UIC)

- Patent Application "METHOD AND SYSTEM FOR MANAGING A NETWORK OF SENSORS" (Aris M. Ouksel and Lin Xiao): February 26, 2009 under Publication number US Patent No. 7,840,353.
- Patent Application, UIC-CZ032. Provisional. Title: "Serendipity Social Computing: Self-Organizing Information Dissemination and Discovery in Mobile Environments." (Inventors: Aris M. Ouksel and Doug Lundquist). 2009

PROFESSIONAL

1- **Awards:**

- Winner of The U.S. DOT (Department Of Transportation) Connected Vehicle Technology Challenge Team, ITS America's "The Best of Intelligent Transportation Systems", 2011.
- Best Paper Award at the International Conference on Mobile Data Management, 2004. Title: "Opportunistic Resource Exchange in Inter-vehicle Ad-hoc Networks"
- Best Paper Award at Grace Hopper Conference, 2007. Paper entitled "A Simulation System for Ad hoc Query-Ready Sensors" (with Lin Xiao and Sudepta Musti, Both students are supervised by me.)
- Recognition and Appreciation Award for contributions made to the International Conference on Pervasive Services 2006.
- Faculty Appreciation Award: Urban Health Summer Enrichment Programs, UIC Grad. College, 1994
- Association for Information Systems, Recognition as Charter Member, 1995.
- Appreciation Award: Ameritech Customer Services, 1996
- Scholarship at Northwestern University, 1977-1981.
- Teaching and Research Assistantships, Northwestern University, 1981-1985.

2- **Promotion and Lab evaluations:**

- **Talens Guilaine's** "Habilitation a Diriger des Recherche", "Contributions a la conception et l'implementation de systemes d'information cooperatives, evolutifs et orientes connaissances," 2011, University of Lyons, France: to Full Professor.
- **Ana Carolina Salgado's** "Habilitation a Diriger des Recherches", "Data Engineering: Modeling and Integration Issues," Université de Versailles Saint-Quentin-en-Yvelines, to Associate Professor.
- Evaluation of LIESP Lab, Lyon 1, 2009.
- Institut des Sciences Appliquees (INSA), Lyon, 2007: HDR (Associate Prof.), 2007
- Computer Information Systems, University of Georgia, 2003: to Full Professor.
- The University of Toulouse 1, France, 2004: to Associate Professor.
- Santa Clara University: Leavey School of Business, 2006: to Associate Professor
- Evaluation of a CyberInfrastructure proposal to merge 5 regional research labs in the areas of image processing, databases, and information systems in Poitou-Charentes, France. 2006.

3- **Editorial Board Positions:**

- **Associate Editor**, International Journal of E-Business Research, Idea Group.(2003-2009)
- **Associate Editor**, Journal of Parallel and Distributed Syst, Kluwer Inc. (2000---2009)
- **Associate Editor**, International Journal of Internet Social Networks (IJISN) (2007----)
- **Associate Editor**, Journal of Knowledge and Info. Syst., Springer-Verlag. (1998-2003)
- **Advisory Board Member**, HICSS, Software Track. (2002-2004). My role is to help shape the content of the Software engineering track at HICSS. The board selects the various mini-tracks and is responsible for awarding the best paper award. This track is responsible for more than a dozen mini tracks in charge of a topic of research interest.
- **Associate Editor**: International Conference On Information Systems (ICIS). (2001)
- **Editorial Board**, INFORMS College of Artificial Intelligence, (1995)

4- **Lectures and Invited Talks (recent)**

- “Collaborative Knowledge Management and Data Discovery : The Challenges and Opportunities Ahead,” International Symposium on Collaborative Technologies and Systems (CTS), 17-21 Mai, 2009, Lombard, Illinois.
- “Cyberinfrastructure and Cybersecurity : Issues, Challenges, and Strategies,” at the Ministry of Defense, Algeria, November 3-5, 2009.
- “Ontologies: State of the Art and Research Challenges and Applications,” Institut des Sciences Appliquées, Lyon, Germany, June 10, 2009.
- “Demand-Driven Publish/Subscribe in Mobile Environments,” Université Claude Bernard –Lyon 1, June 2007.
- “Serendipitous Information Dissemination and Discovery in Mobile Ad-hoc Networks: Market-Based Approach”, Paderborn University, Germany, October 007, NOTERE 2007, Marrakech, June 4-8, 2007,
- “Activity-Driven Self-Organizing Wireless Sensor Networks” at the Dagstuhl Seminar, the International Conference and Research Center, in Germany, October, 2006.
- "Cross-layer Integration and Optimization of Localization, Indexing and Query Processing in Wireless Ad Hoc Sensor Databases", EPFL-SRI, Ecole Polytechnique Fédérale de Lausanne, Switzerland, July, 2006.
- "A Market-Based Approach to Information Dissemination and Discovery in Mobile Ad-hoc Networks" Purdue University, Sept. 2005.

5- **Keynote Speaker:**

- 2011:** Keynote title: “Automated Information Factories,” International Conference Extraction and Management of Knowledge, Nov. 23-25, 2011, Tangiers, Morocco.
- 2010:** Keynote title: “Collaborative Data Management and Data Discovery: Applications Challenges and Opportunities,” International Conference on Web and Information Technologies, June 16-19, 2010, Marrakech, Morocco.
- 2009:** Keynote title: “Automated Information Factories: The 21st Information Industrial Revolution,” at the 2nd International Workshop on Multimedia Distributed Systems, Dec 7-12, 2009, Passau, Germany, and the 5th IEEE International Conference on Signal Image Technology and Internet-Based Systems, Nov. 29-Dec 4, 2009, Marrakech Morocco.
- 2009:** Keynote title: "Ontologies: Créer de l'Ordre à partir du Chaos, Etat de l'Art Challenges," Colloque sur l'Optimisation and Systemes d'Informations, May 24-27, 2009, Annaba, Algeria.
- 2009:** Keynote Title: “Ontologies: State of the Art and Research Challenges and Applications,” The IEEE International Conference on Research Challenges in Information Science, RCIS 2009, April 22-24, Fes, Morocco.
- 2009:** Keynote title: “What is “Intelligence Economique””? Colloquium: l'Entreprise et ses Enjeux a l'ère du Numérique Hotel Sheraton-Tunis, February 28-29.
- 2008:** Keynote title: " Business Intelligence: Essentials, Information Systems, and Economic Challenges,” at the IEEE International Conference on Information Systems and Economic Intelligence (SIIE'08), Tunisia, Feb 14-16.

- 2007:** Keynote title: "Ontologies: Créer de l'Ordre à partir du Chaos, Etat de l'Art Challenges, "Journées Francophones sur les Ontologies, October 18, 2007, Sousse, Tunisia.
- 2007 :** Keynote title : "Wireless Sensor Networks : Applications and Research Challenges," European Wireless 2007, Paris, France, April 1-4, 2007, NOTERE 2007, Marrakesh, Morocco, June 4-8, 2007
- 2006:** Keynote title: " Emergent Semantics and Self-Organization in Inter-Organizational Workflows", at AAMAS-CIOW, Conference on Inter-organizational Workflows, May, 2006, Hakodate, Japan, and University of Algiers, Algeria, July, 2006.
- 2006:** Keynote title: "The Promise of Sensor Networks to Revolutionize our Environment: Applications and Research Challenges," at the IEEE International Conference on Pervasive Services, June 28, 2006, Lyon, France, and at the European Wireless Conference in Paris, April 3, 2007.
- 2006:** Keynote title: "Organizational Complexity: Co-emergence of Meaning, Context, Systems and Communities," forthcoming Keynote speech at the ACM/IEEE Intern. Conf. on Signal-Image Technology and Internet-Based Systems, Dec. 2006, Hammamet, Tunisia.
- 2005:** Keynote title: "Advances in Wireless and Mobile Technologies: Impacts and Technology Transfer" at ISPS05, International Conference on Programming Systems-Algeria. This was done in the presence of the Minister of Higher Education and the Rector of the University of Algiers.
- 1997:** Keynote title: "Ontologies and Their Role in Data Integration on the Web". International Conference on Cooperative Information Agents. CIA-97.
- 1994:** Keynote title: "Managing Information on Global Basis" at the **Chicago International Trade Conference** 'Be Here Now'.

6- **Book and Journal Issue Editing**

- "Databases, Information Systems, and Peer-to-Peer Computing" Wee Siong Ng, Beng Chin Ooi, Aris Ouksel, Claudio Sartori. Springer, LNCS3367, 2004.
- "Agents and Peer-to-Peer Computing" Gianluca Moro, Aris M. Ouksel, and Claudio Sartori. Springer LNCS2530, 2003.
- **Special Issue of SIGMOD** record on Semantic Interoperability in Global Information Systems. 1999. Aris Ouksel and Amit Sheth
- **Special Issue of** the Journal of Forecasting and Social Change, Elsevier 2006, with Kevin DeSouza on "Information Technology and Terrorism.
- **Special Issue of** the Journal of E-Business Research with Richard Potter, "Modern Models and Superior Strategies: Cases from the Cutting Edge of E-Business", 2007.
- "Databases, Information Systems, and Peer-to-Peer Computing," Gianluca M., S. Bergamaschi, S. Joseph, J-H. Morin, A. M. Ouksel, LCNS 4125, Springer 2007,

7- **Recent Research and Business Reports (starting in 1997)**

- "Managing and Integrating Data in P2P Databases", (with P. Boncz, A. Bonifati, P. Janacik, B. Konig-Ries, A. Llaramendi, W. Lehrer, P. J. Marron, W. May, K. Romer, B. Sapkota, K. Sattler, H. Schweppe, R. Steinmetz, C. Turker) Proc. of the Dagstuhl seminar on Scalable Data Management in Evolving Networks, 2006, Germany, October.

- “Atomicity in Mobile Networks”, (with J. H. Bose, S. Boettcher, P. K. Chrysanthis, A. Delis, L. Gruenwald, A. Mondal, S. Obermeier, G. Samara, S. Viglas), Proceedings of the Dagstuhl seminar on Scalable Data Management in Evolving Networks, 2006, Germany, October.
- “P2P, Adhoc and Sensor Networks – All Different and All Same,” (with P. Boncz, A. Bonifati, P. Janacik, B. Konig-Ries, A. Llaramendi, W. Lehrer, P. J. Marron, W. May, K. Romer, B. Sapkota, K. Sattler, H. Schweppe, R. Steinmetz, C. Turker) Proc. of the Dagstuhl seminar on Scalable Data Management in Evolving Networks, 2006, Germany, October.
- “WarGame Proposal” Submitted on request by Ameritech, 1997.
- “Ameritech’s Situational Business Gaming Exercices: The Case of SEARS Major Account Team” Submitted on request by Ameritech, 1997.
- “Telecommunications and Network Management Challenges in the Banking and Financial Services Sector: The case of FIRST CHICAGO/NBD” Submitted on request by Ameritech, 1998.

8- **Panelist or Panel Chair: (starting in 1997)**

- 2011:** **Panelist:** the Congress on Intelligent Transportation Systems, “Keeping the Economy Going, Orlando, Florida.
- 2010:** **Panelist:** CTS 2010, on Wireless Sensor Networks and Collaboration Across Heterogeneous Contexts.
- 2003:** **Panel Chair:** VLDB-DBISP2P, Berlin, on research issues in peer-to-peer computing
- Panel Chair:** AAMAS-AP2PC, Australia, on research issues on peer-to-peer computing.
- 2002:** **Panel Chair:** AAMAS-AP2PC, Bologna, on research issues on peer-to-peer computing.
- 2002:** **Panelist:** ICIS-Electronic Commerce, Barcelona,: “Future of Mobile Computing”,
- 2002:** **Panel Chair:** AAMAS-AP2PC, Bologna, on research issues on peer-to-peer computing.
- 2002:** **Panelist:** ICIS-Electronic Commerce, Barcelona,: “Future of Mobile Computing”,
- 1999:** **NSF Panelist** on Wireless and Mobile Technologies and Impacts on the Economy
- 1999:** **Panel Chair:** KDEX99: Convergence of Technologies on the Web: The case of Distributed Artificial Intelligence, Databases, and Information Retrieval
- 1998:** **Panelist:** International Conference on Cooperative Info. Syst. (CoopIS), New York,
- 1998:** **Panelist:** International Conference on Information Systems (ICIS), Helsinki
“The 3-facetted Organization: Cooperation amongst Heterogeneous Knowledge Sites”

9- **Conference Chair (Partial)**

- 2009:** The International Conference on Software Systems and Economic Intelligence, SIIE’09, Feb 12-14, 2009.
- 2008:** The International Conference on New Technologies of Distributed Systems (NOTERE’08), Lyon, France,

10- **Program Committee Member/ Steering Committee/ (since 1997)**

2009-2010:

1. 2nd International Workshop on Parallel and Distributed Computed in Finance (PDCoF'2009).
2. 2nd International Conference on Advances in Databases, Knowledge, and Data Applications (DBKDA'2009).
3. 3rd IEEE Research Challenges in Information Science (RCIS'2009).
4. 9th Annual International Symposium on Applications and the Internet (SAINT'2009).
5. 2nd IEEE International Conference on Information Systems and Economic Intelligence (SIIE'2009).
6. 3rd Journees Francophones sur les Ontologies (JFO'2009)
7. IEEE International Conference on Services Computing (SCC 2009)
8. International Workshop on the Role of Services, Ontologies, and Context in Mobile Environments (RoSOC-M'09)

2008-2009: AP2PS'09, BPM'09, COSI'09, DBKBA'09, ICWIT'09, INTERNET'09, ISPS'09, NOTERE'09, NWeSP'09, PDcoF'09, RCIS'09, SIIE'09, WHICEB'09, WWS'09, JFO'09.

2007-2008: ANSA'08, APIS'08, APSCC'08, ASWAN'08, CIA'08, CIOW'08, InfoScale'08, InterDB'08, JFO'08, NOTERE'08, PDC0F'08, PerCom'08, RCIS'08, RoSOC'08, SAINT'08, SCC'08, SIIE'08, SSDU'08, SWAE'08, WPS'08.

2006-2007:

IEEE International conference on Data Engineering (ICDE, Istanbul, Turkey)\
IEEE International Conference on Pervasive Services (ICPS)
International Conference on Scalable Information Systems (INFOSCALE, Shanghai, China)
International Symposium on Application and The Internet (SAINT'2007, Hiroshima, Japan)

2005-2006:

IEEE International Conference on Services Computing (Florida, USA)
IEEE International Conference on Data Engineering (ICDE, Atlanta, USA)
Hawai's International Conference on Systems Sciences (HICSS, Hawaii, USA)
International Conference on Service-Oriented Computing (SOC, Amsterdam, Netherlands)
International Conference on Web Services (Seoul, Korea)
International Conference on Programming Systems (Algiers, Algeria)
International Workshop on Database Interoperability (Namur, Belgium)
International Conference on Database Systems for Advanced Applications (Singapore)
International Workshop on Agents and Peer-to-Peer Computing (Amsterdam, Netherlands)
International Workshop on Database and Information Systems and P2P Computing (Toronto)
International Conference on E-Commerce, E-Business, and E-Government (Poznan, Poland)
International Conference on Semantic Networks (Paris, France)

2004: RIDE' 04, AAMAS-AP2PC, VLDB'04: Semantic Web and P2P, Toronto; ICWS'04, IFIP 2.6, WDAS.

2003: ER'03: Entity-Relationship Modeling, Chicago.

AAMAS-AP2PC: Agents and Peer-to-Peer Computing, Australia.

VLDB'03: Semantic Web and P2P, Berlin.

HICSS'03: Hawai Int. Conf. On Software Systems, Hawai, organizer

WITS'03: Int. Workshop on Information Technology Systems, Seattle.

2002: HICSS'02: Hawai Int. Conf. On Software Systems, Hawai, organizer.

AAMAS-AP2PC: Agents and Peer-to-Peer Computing, Bologna.

- WITS'02: Int. Workshop on Information Technology Systems, Barcelona
- 2001:** ICIS'01: Int. Conf. On Information Systems, New Orleans, USA
 CIA'01: Int. Conf. On Intelligent Agents, Modena, Italy
 WITS'01: Int. Workshop on Information Technology Systems, New Orleans
 HICSS'01: Hawai Int. Conference on Software Systems, Organizer
 RIDE'01: Heidelberg, Germany
- 2000:** WITS'00: Int. Workshop on Info. Tech. Systems, Brisbane, Australia
 CoopIS'00: Int. Conference on Cooperative Info. Systems, Eilat, Israel.
 CIA'00: Int. Conf. On Intelligent Agents, Boston, MA
 ADL'00: Int. Conf. On Digital Libraries, Washington, D.C.,
 EFIS'00:
- 1999:** WITS'99: South Carolina.
 CoopIS'99: Edinburgh, Scotland, Program Committee
 CIA'99: Uppsala, Sweden
 KDEX'99: Knowledge and Data Exchange, Chicago, US
- 1998:** WITS'98: Helsinki, Finland.
 CIKM'98: Intern. Conf. on Info. and Knowledge Mgmt., Washington, DC.
 CoopIS'98: New York City, USA.
 HICSS'98: Maui, Hawai
 CIA'98: Paris, France
 ER'98: Intern. Conf. on Entity Relationship, Singapore.
 ICAST'98: Intern. Conf. on Advanced Software Technologies, Naperville, USA.
- 1997:** WITS'97: Atlanta, USA.
 CoopIS'97: North Carolina, USA.e.
 NGITS'97: Next Generation Info. Tech. Syst., Jerusalem, Israel, June 1997.
 RIDE 97: WWW. E-Commerce, Data Mining, Data Warehousing.
 CIA'97: Kiel, Germany.

11- **Referee for the following journals and agencies:**

National Science Foundation (NSF), National Science Foundation (Israel), Agence Nationale de la Recherche (ANR, France), Computational and Mathematical Organization Theory, Information Systems Research (ISR), Journal of Electronic Commerce Research Applications (ECRA), IEEE Transactions on Mobile Computing, Journal of Data and Knowledge Engineering, Computer Journal, Journal of Intelligent Information Systems (JIIS), Information Systems Journal (ISJ), Group Decisions and Negotiation, ACM Transactions on Database Systems (TODS), IEEE Transactions Knowledge and Data Engineering, IEEE Transactions on Software Engineering, IEEE Software, HICSS, COMPSAC, Intern. Conf. On Tools for Artificial Intelligence, AJSE, Symposium on Principles of Database Systems, ACTA Informatica, Data and Knowledge Engineering, Theory and Practice of Object Systems. IBM Systems Journal. Swiss National Science Foundation. This does not include refereeing for several conferences.

12- **Memberships:**

Association for Computing Machinery (ACM).
 ACM Special Interest Group on Management of Data.
 Institute of Electronics and Electrical Engineering (IEEE).
 IEEE Computer Society: Tech. Committees on Database Eng. and Office Automation.
 INFORMS: Institute for Operations Research and Management Science.

STUDENT RESEARCH SUPERVISION

PhD Students Supervision:

1. K. Mihavics, "Modeling the Effects of Organizational Learning on Organizational Structure". UIC-CBA-IDS. Completed May 1996.
2. A. Ghazal, "On Linear Satisfiability and Subsumption and Their Application to Knowledge Base Systems". UIC-ENG-CS. Completed, May 1995.
3. C. Naiman, "SCOPES: An Architecture to Support Coordination Across Heterogeneous Information Systems". UIC-CBA-IDS. Completed May 1995.
4. R. Vyhmeister "Organizational Learning and Organizational Structure". UIC-CBA-IDS. Completed March 2000.
5. A. Iqbal "Context Discovery in Web-Enabled Information Sources". MIS. Passed Preliminary Examination, ABD, UIC-CBA-IDS. May 98.
6. J. Watson "Organizational Dissonance: Customer Relationship Management", UIC-CBA-IDS. Completed, Summer 2003.
7. Thomas Tesch "Electronic Business to Business Brokers". CS. GMD-IPSI, Darmstadt, Germany (Co-Supervised with Prof. Neuhold). Completed 2001.
8. Franz Kammermeier "Concurrency in the Nested Interpolation-Based Grid File". CS. Kaiserslautern University, Germany. (Co-Supervised with Prof. O. Mayer), Completed 2005.
9. Oana Jurca, "A Publish/Subscribe Approach to Processing Continuous Queries Over Sensor Streams," Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland, March 2010. (Co-Supervised with Prof. Karl Aberer).
10. Ferdi Eruysal, "Price Discrimination, Information Privacy and Customization Effects on Market Share". UIC-IDS-MIS. expected December 2011..
11. Lin Xiao, "Efficient Integrated Architectures for Mobile Sensor Databases". UIC-ENG-CS. Completed March 2011..
12. Doug Lundquist, "Market-based Information Dissemination and Discovery in Mobile Environments and Applications to Transportation". UIC-IDS-MIS. Completed April 2011..

External PhD dissertation committee member and Evaluator:

1. S. Milliner, "Dynamic Resolution of Conceptual Heterogeneity in Large Scale Distributed Information Systems", (University of Queensland, Australia). (External Examiner), 2000.
2. Nicolas Figay, "Interoperability of technical enterprise applications," Université Claude Bernard – Lyon 1, (supervisor: Parisa Ghodous), November 27, 2009
3. M. Moises LIMA DUTRA, "An Ontology-Based Approach to Deal with Conflicts in Collaborative Design," Université Claude Bernard - Lyon I, France, (Supervisor: Ricardo Goncalves), November 27, 2009
4. Laura SILVEIRA MASTELLA, "Semantic Exploitation of Engineering Models: Application to Petroleum Reservoir Models," Ecole Nationale Supérieure des Mines De Paris, France, (Supervisor: Michel PERRIN), March 2010.
5. Kudagba Kunale, "Integration Semantique des Sources XML de Donnees Proteomiques," Université Sidi Mohamed Ben Abdallah, Fes, Morocco, July 2011.

PhD Committee Member:

1. Dragut, Eduard Constantin, 2010, UIC-CS, "A Framework for Transparency Accessing Deep Web Services,"
2. Loay Abusalah, 2006, UIC-ECE, "Enhancing Trust-Aware Routing in Multi-Hop Wireless Networks,"
3. Shuang Liu, 2006. UIC-CS. "Improve Text Retrieval Effectiveness".
4. Huabei Yin, 2006, UIC-CS: "Managing Uncertainty and Imprecision in Spatio-Temporal Databases"
5. Hu Cao, 2006. UIC-CS. "Movement Data Management".
6. Zoran Despotovic, CS. EPFL, Switzerland, "Building Trust-Aware P2P Systems: From Trust and Reputation Management to Decentralized E-Commerce Applications," completed 2005. (Second supervisor, Primary: Prof. Karl Aberer).
7. Huiyong Xiao, 2004. UIC-CS "
8. Zhenwei Yu, 2004. UIC-CS "
9. Haiping Xu, 2003, UIC-CS, "A Model-Based Approach for Development of Multi-Agent Software Systems,".
10. Goce Trajcevski: 2002 UIC-CS, "Managing Moving Objects Database with Uncertainty".
11. King-Lup Liu, 1999 UIC-EECS, "Retrieving Text Documents from the Internet".
12. Jan Sunjaya, 1996 UIC-IDS: "A Numerical Study of Random Polling Systems with Correlated Input Process".
13. Y. Huang, 1995-EECS: "Dynamic Data Replication in Distributed Systems".
14. S. Petravick: "Audit and Control Paradigms: Implication of the Information Technology Revolution", 1994, UIC-IDS.
15. W. Meng, 1992 UIC-EECS, "A Theory of translation from relational queries to hierarchical queries".
16. Chengwen Liu, 1990 UIC-EECS, "Distributed Query Processing:Implementation, Performance Evaluation and Experiences", 1990.
17. Wei Sun, 1991 UIC_EECS: "Automatic Knowledge Acquisition, Knowledge Maintenance and Semantic Query Optimization in Database Systems", 1991.
18. Shyam Sarkar: 1989 UTD "Architecture and Language for Layered Relational Database".

M.S. Students Thesis Supervision:

1. Musti, Sudepta: "Activity-Based Self-Organizing Wireless Networks," 2006.
2. Chenwei Huang: "Implementation of SCOPES using JAFMAS", 1999.
3. Mehmet Sayal: "Compression of Images", June 1996.
4. Zhang Lin: "Implementation of IBGF and Query Processing", June 1993.
5. Yan Mei: "A Cache Scheme for B-Trees", 1993.
6. Yaagoub: "The Interpolation-Based Bintree & its Application to Image Processing", 88.
7. A. Ghazal: "investigation and Implementation of some Probablistic Algorithms", 1988.
8. J.M. Abdul Ghaffar: "Concurrency in Interpolation Based Grid Files", 1988.

OTHER INFORMATION

Committee Work:

UIC Provost Task Force on Research, 2009.
UIC Senate Faculty Affairs, 2005-2008
UIC Senate, 2005-2008
Ad-hoc MS-MIS committee, 2002----
Ad-hoc PhD-MIS committee, 2002----
CBA Task Force on International Collaborative Programs, 2003
MIS Committee, 2000-2003
UIC Senate, 1999-2002
Member of the Dean's search committee, 97-98.
Executive Committee, 97-98
MIS Committee Chair, 97-98
Member of the AACSB reaccreditation team, 96-97
College of Business Administration, Administrative Council, 96-97.
College of Business Administration, Priorities Committee, 96-97..
UIC Chancellor's Business-Higher Education Forum, 1996.
UIC College of Business Sub-Committee on Executive Education, 1996.
UIC College of Business PhD Program College Committee, 1994-97
UIC College of Business Administration Coordinating Committee, 1994-97
UIC College Advisory Committee for Library Business Collections.
UIC College of Business Task Force on Information Technology, 1995-96.
UIC College of Business Ad-Hoc Committee to review Non-tenure track appointments.
MIS Committee Chair, 1992.
UIC College Search Committee for Director of Computer Services.

PRINCIPAL PUBLICATIONS

(Nonrefereed publications, Academic and business reports are not included)

Refereed Journal Publications:

1. Ouksel, A. M., and L. Xiao, "Virtual In-Network Aggregators and Query Processors in Large Mobile Ad-Hoc Sensor Databases," submitted, basis for **US Patent US 2009/0055691** A1, 2011.
2. Ouksel, A. M., and F. Eruysal, "Loyalty Intelligence and Price Discrimination in a Duopoly," **Electronic Commerce Research and Applications** (ECRA), accepted 2010, forthcoming, [doi:10.1016/j.elerap.2010.10.001](https://doi.org/10.1016/j.elerap.2010.10.001)
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5. A. Bonifati, P. Chrysanthis, A.M. Ouksel, and K. Sattler, "Distributed databases and peer-to-peer databases: past and present," **SIGMOD Record** 37(1), pp. 5-11, 2008.
6. Barhamgi, M., A. M. Ouksel, and D. Benslimane, "PWSMS: A Peer-to-Peer Web Service Management System for Data Sharing in Collaborative Environments," **International Journal of Computer Syst. Sci. and Engineering** IJCSE, 23(2), pp.23-53, 2008.
7. DeSouza, K. C., T.H. Winston, and A. M. Ouksel, "Information technology, innovation and the war on terrorism," **Technological Forecasting and Social Change**, 74, 2, pp 125-128, 2007.

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9. Ouksel, A. M., and G. Moro, "G-Grid: A Class of Scalable and Self-Organizing Data Structures for Multi-dimensional Querying and Content Routing in P2P Networks," **Springer Lecture Notes in Computer Science**, (LNCS): Agents and Peer-to-Peer Computing, Vol. 2872, pp. 123-137, 2004.
10. Aberer, K., J. P., Cudre-Mauroux, and A. M. Ouksel, "Emergent Semantics Principles and Issues," **Springer Lecture Notes in Computer Science** (LNCS): Database Systems for Advanced Applications, Vol. 2973, pp. 25-38, 2004.
11. Xu, B., A. M. Ouksel, and O. Wolfson, "Opportunistic Resource Exchange in Inter-vehicle Ad-hoc Networks," **IEEE Intern. Conference on Mobile Data Management**, pp. 1-12, 2004. **BEST PAPER AWARD.**
12. Ouksel, A. M., "In-Context Information Filtering On the Web: An Emergent Semantics P2P Approach," **SIGMOD Record**, 22(3), pp. 65-71, 2003.
13. Moro, G., A. M. Ouksel, and C. Sartori, "Agents and Peer-to-Peer Computing: A Natural Combination," **Springer Lecture Notes in Computer Science (LNCS): Agents and Peer-to-Peer Computing**, Vol. 2530, pp. 1-12, 2003.
14. Tesch, T., Fankhauser, and Ouksel, A. M., "Arbitration Protocols for Competing Software Agents," (**International Journal of Cooperative Information Systems**, 10(1), pp. 125-143, 2001.
15. Ouksel, A. M., and R. Vyhmeister, "Performance of Organizational Design Models and Their Impact on Organizational Learning," **Journal of Mathematics and Computational Organization Theory**, 6, pp. 395-410, 2000.
16. Ouksel, A. M., and A. Sheth, "Semantic Interoperability in Global Information Systems: An introduction to the research area," **SIGMOD Record**, 28(1), 1999.
17. Ouksel, A. M., and A. Iqbal, "Ontologies are not the Panacea in Data Integration: A Flexible Coordinator for Context Construction," **Journal of Distributed and Parallel Databases**, 7(1), pp.7-35, 1999.
18. Ouksel, A. M., K. Mihavics, and P. Chalos, "The Role of Accounting Information Systems in Organizational Learning: A Simulation," **Journal of Accounting and Information Technologies**, 7(1), pp.1-19, 1997.
19. Mihavics, K., and A. M. Ouksel, "Learning to Align Organizational Design and Data," **Journal of Mathematics and Computational Organization Theory**, 1:2, pp.143-155, 1996.
20. Naiman, C., and A. M. Ouksel, "A classification of Semantic Conflicts in Heterogeneous Information Systems," **Journal of Organizational Computing** 5(2), pp. 167-193, 1995.
21. Ouksel, A. M., and Naiman, C., "Coordinating Context Building in Heterogeneous Information Systems," **Journal of Intelligent Information Systems** 3(1), pp. 151-183, 1994.
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26. Ouksel, A. M., and F. Makedon, "The anatomy of an Object Oriented Visualization System for Algorithm Design," **Springer Lecture Notes in Computer Science**, Vol. 360, pp. 438-451, 1989.
27. Ouksel, A. M., and J. Abdelghaffar, "Concurrency in Multidimensional Linear Hashing," **Springer Verlag Lecture Notes in Computer Science**, Vol. 367, 233-240, 1989.
28. Ouksel, A. M., and P. Scheuermann, "Implicit Data Structures for Linear Hashing Schemes," **Information Processing Letters**, 29(4), pp. 183-189, 1988.
29. Scheuermann, P., and A. M. Ouksel, "Multidimensional B-Trees for Associative Searching in Database Systems," **Information Systems Journal**, 7(2), pp. 123-137, 1982.
30. Ouksel, A. M., and P. Scheuermann, "Multidimensional B-Trees: Analysis and Dynamic Behavior," **BIT**, 21(4), pp.401-418, 1981.

Book Chapters:

31. Ouksel, A. M., "A Framework for a Scalable Agent Architecture of Cooperating Heterogeneous Knowledge Sources," in **"Intelligent Information Agents: Agent-Based Information Discovery and Management on the Internet,"** Matthias Klusch Ed., Springer Verlag, 1999.
32. Ouksel, A. M., "Order-preserving Partitioning Schemes in Database Machines and Database Management," in E. Ozakarahan's **"Database Systems"**, Addison Wesley, 1986.

IMPORTANT CAVEAT: Several publications in conferences such as PODS, VLDB, MDM, ICDE and others below have been the basis of my NSF grants. The conferences are considered among the most prestigious in the field of computer science. Any senior Computer Science professors in database management and/or mobile computing will provide confirmation.

Refereed Conferences Publications:

33. Ouksel, A. M., and D. Lundquist, "Cap and Trade Policies for Resource Management in Vehicular Networks and Other Applications," was one of the top six winners to the Connected Vehicle Technology Challenge. Results to be presented at the 18th ITS World Congress, October 16-20, 2011, Orlando, Florida.
34. Tout, R., P. Ghodous, M. Tanasoiu, A. M. Ouksel, "Data Persistence in P2P Backup Systems," In "Global Perspective for Competitive Enterprise, Economy and Ecology". Sixteenth ISPE International Conference on Concurrent Engineering, 149-156, Springer 2009.
35. Lundquist, D., and A. M. Ouksel, Dynamic Subscription Permission: Extending the Depth of Demand-Controlled Flooding," Proceedings of IEEE Asia-Pacific Services Computing Conference (APSCC), Taiwan, Dec. 2008. {<http://dx.doi.org/10.1109/APSCC.2008.2>}
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37. Scuturuci, V.M., D.M. Suciu, Vuillemot, R., A.M. Ouksel, and L. Brunie, "Detecting Anomalies in Data Streams Using Statecharts," Proceedings de Journees Francophones "Extraction and Gestion des Connaissances," January 26-29, 2010, Hammamet, Tunisia.
38. Barhamgi, M., Benslimane, D., and A. M. Ouksel, "Composing and optimizing data providing web services," International Conference on the World-Wide Web (WWW) 2008: 1141-1142.
39. ElKhoury, V., Benani, N., and A. M. Ouksel, "Distributed Key Management in Dynamic Outsourced Databases: a Trie-Based Approach," The International Conference on Advances in Databases, Knowledge, and Data Applications, DBKDA 2009, March 1-6, 2009 - Cancun, Mexico.
40. Liman, L., S. Benbernou, M-S. Hacid, A. Illarramendi, and A. M. Ouksel, "Mapping Discovery in P2P databases: a query-based approach," Sixth International Workshop on Databases, Information Systems, and Peer-to-Peer Computing, Sixth International Workshops, DBISP2P 2008, Auckland, New Zealand, August 23, 2008.
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42. Lundquist, D., and A. M. Ouksel, "Efficient Demand- and Density-controlled Publish/Subscribe Protocols in a Mobile Environment," DEBS'07, the Distributed and Event-Based Systems International Conference, 2007, Toronto, Canada, June.
43. Lin, X., S. Musti, and A. M. Ouksel, "A Simulation System for Ad hoc Query-Ready Sensors," Grace Hopper Conference, 2007. **BEST PAPER AWARD.**
44. Ouksel, A. M., "Self-Balancing Selective Information Dissemination and Discovery in Mobile Environments," IEEE International Conference on Data Engineering (ICDE), March 2006, Atlanta, p120-13.
45. Xiao, L., and A. M. Ouksel, "Scalable Self-Configuring Integration of Localization and Indexing in Wireless Ad-hoc Sensor Networks," Proc of the 7th IEEE International Conference on Mobile Data Management (MDM'06), Nara, Japan, 2006.
46. Ouksel, A. M., "Scalable Data Management in Mobile Environments: protocol design in MANETs and data management in mobile sensors," Scalable Data Management in Evolving Networks 2006.
47. Moro, G., G. Monti, and A. M. Ouksel, "Routing and Localization Services in Self-Organizing Wireless Ad-hoc and Sensor Networks Using Virtual Coordinates," ICPS'06: IEEE International Conference on Pervasive Services, June 2006, Lyon, France.
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52. Aberer, K., et al., "Emergent Semantics Systems," Proceedings of the first International Conference on Semantics of a Networked World (ICSNW04), Paris, France
53. Dillenburg, J., et al. "Applications of a Transportation Information Architecture", The 2004 IEEE International Conference on Networking, Sensing and Control, Taipei, Taiwan, March, 2004.
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55. Wolfson, O., and A. M. Ouksel, "Resource Discovery in Disconnected Mobile Ad-Hoc Networks," Proc. of the international Workshop on Next Generation Geospatial Information, Cambridge, MA, Oct. 2003.
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57. Liu, C., A. M. Ouksel, P. Sistla, J. Wu, C. T. Yu, and N. Rish, "The Performance of the G-tree and its application to Fuzzy Databases", International Conference on Information and Knowledge Management, Maryland, Nov. 1996.
58. Ouksel, A. M., and I. Ahmed, "Coordinating Knowledge Elicitation to Support Context Construction in Cooperative Information Systems". International Conference on Cooperative Information Systems, in Brussels, June 1996.
59. Ouksel, A. M., and I. Ahmed, "Using SCOPES for Dynamic Construction of Context in Heterogeneous Systems". Association for Information Systems Conference, Phoenix, Arizona, August 1996.
60. Ouksel, A. M., and I. Ahmed, "Plausible Inference of Context in Heterogeneous Information Systems". Fifth International Workshop of Information Technology and Systems, Amsterdam, December 1995.
61. Ghazal, A., and A. M. Ouksel, "Subsumption in Constraint Query Languages Involving Disjunction of Range Constraints," International Symposium on Mathematics and Artificial Intelligence 1994.

62. Ouksel, A. M., and N. Naiman, "Cooperation in Heterogeneous Information Systems," Next Generation Information Technologies and Systems, June 1993.
63. Ouksel, A. M., and C. Naiman, "Semantic Communication Protocols for Heterogeneous Database Systems". Workshop on Information Technologies and Systems, June 1993.
64. Ouksel, A. M., and C. Naiman, "Semantic Mechanisms for Cooperation in Heterogeneous Database Systems". International IEEE Conference on Man and Cybernetics, October 1992.
65. Ouksel, A. M., A. Ghazal, and O. Mayer, "Concurrency Control in Interpolation-Based Grid Files" International Conference on Database and Expert Systems Applications (DEXA), September 1992.
66. Ouksel, A. M., and O. Mayer, "The Nested Interpolation-Based Grid File" Third Symposium on Mathematical Fundamentals of Database and Knowledge Base Systems (MFDBS-91), Gohren, Germany, May 5-10, 1991.
67. Ouksel, A., and J. Abderlghaffar, "Concurrency in Multidimensional Linear Hashing" International Conf. On Foundations Data Organizations, 1989.
68. Ozkarahan, E., and A. M. Ouksel, "Dynamic Order-preserving Partitioning for Database Machines" Proc. 11th International Conference on Very Large Data Bases (**VLDB**), 1985.
69. Ouksel, A. M., "The Interpolation-Based Grid File" Proc. 4th ACM SIGACT-SIGMOD Symposium on Principles Of Data Base Systems (**PODS**), pp20-27, 1985.
70. Ouksel, A. M., "Linear Binary Search Trees and Their Use for Order-preserving Dynamic Hashing" International Conference on Foundations of Data Organizations, Japan, 1985.
71. Ouksel, A. M., and P. Scheuermann, "Storage Mappings in Multidimensional Linear Dynamic Hashing" Proc. 2nd ACM SIGACT-SIGMOD Symposium on Principles Of Data Systems (**PODS**), pp90-105, 1983.
72. Ouksel, A. M., "A Data Structure for Parallel Processing of Large Sparse Matrices", abstract in the Proceedings of the SIAM Society for Industrial and Applied Mathematics, SIAM Conference on Parallel Processing for Scientific Computing, Dec 11-13, 1989, Chicago.

SUBMITTED JOURNAL PAPERS

73. Lundquist, D., A. M. Ouksel, and A. Khokar, "CACL: A Cross-Layer Context-Aware Broadcast Scheme for Controlled Flooding," CISORS, TechReport #5, Dec, 2010...
74. Ouksel, A. M., and L. Xiao, "Virtual In-Network Aggregators and Query Processors in Large Mobile Ad-Hoc Sensor Databases," CISORS, TechReport #6, Jan., 2011.

PAPERS IN PREPARATION

75. Ouksel, A. M., and F. Eruysal, "Costs Matter in a Duopolistic Price Discrimination and Market Segmentation," CISORS, TechReport #10, Sept 2011.
76. Ouksel, A. M., and Dongmei, Z. "Entrepreneurship Network Information Search Dynamics," CISORS, TechReport #7, 2011.
77. Ouksel, A. M., and T. Lee, "Protocols for Efficient Automated Exchange under Information Manipulation and Non-Disclosure in Supply Chains," CISORS, TechReport # 8, 2011
78. Ouksel, A. M., "Decisional Data Mining for Organizational Learning and Performance," CISORS, TechReport #4, 2010.
79. Ouksel, A. M. "Cap-and-Trade Policies for Resource Management in Vehicular Networks and Other Applications," Grant from the College Business Administration, UIC, June 2011, CISORS, TechReport #9, 2011.

PRESENTATIONS at conferences

1. "Dynamic Subscription Permission: Extending the Depth of Demand-Controlled Flooding," Proceedings of IEEE Asia-Pacific Services Computing Conference (APSCC), Taiwan, Dec. 2008.
{<http://dx.doi.org/10.1109/APSCC.2008.228>}.
2. "Distributed Delay: Improving Network Throughput by Reducing Temporal Saturation," Proceedings of the IEEE NTMS, Cairo, Egypt, 2009. {<http://dx.doi.org/10.1109/NTMS.2009.5384660>}..
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7. "Mapping Discovery in P2P databases: a query-based approach" (with Lyes Limam, Salima Benbernou, Mohand-Said Hacid, Arantza Illarramendi), Sixth International Workshop on Databases, Information Systems, and Peer-to-Peer Computing, Sixth International Workshops, DBISP2P 2008, Auckland, New Zealand, August 23, 2008.
8. "Backing Up Web Service-Accessed Data Sources in Loosely-Coupled Information Systems", The 19th International Conference on Advanced Information Systems Engineering (CaiSE'07)", 531-545, 2007, Sweden, June."Efficient
9. Demand- and Density-controlled Publish/Subscribe Protocols in a Mobile Environment", , DEBS'07, the Distributed and Event-Based Systems International Conference, 2007, Toronto, Canada, June.
10. "Self-Balancing Selective Information Dissemination and Discovery in Mobile Environments," IEEE International Conference on Data Engineering (ICDE), March 2006, Atlanta, p120-13.
11. "Scalable Self-Configuring Integration of Localization and Indexing in Wireless Ad-hoc Sensor Networks," in Proc of the 7th IEEE International Conference on Mobile Data Management (MDM'06), Nara, Japan, 2006 "Routing and Localization Services in Self-Organizing Wireless Ad-hoc and Sensor Networks Using Virtual Coordinates," ICPS'06: IEEE International Conference on Pervasive Services, June 2006, Lyon, France.
12. "Tolerance of Imprecision in Efficiently Managing Sensor Databases", MobiDE04-ACM Int. Workshop on Data Engineering for Wireless and Mobile Access, June 2005
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16. "Emergent Semantics Principles and Issues" Book Chapter. (with Karl Aberer, Jean-Philippe Cudre-Mauroux) Lecture Notes in Computer Science: Database Systems for Advanced Applications, v2973, pp25-38, 2004.
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21. "Use of E-Business Technologies in Customer Relationship Management: A Case Study Perspective," (Ranganathan C. and James Watson Jr.) Proc. Of Web 2002: International Workshop on Electronic Business Management, Barcelona, 2002
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27. "Subsumption in Constraint Query Languages Involving Disjunction of Range Constraints" (with A. Ghazal). International Symposium on Mathematics and Artificial Intelligence 1994.
28. "Cooperation in Heterogeneous Information Systems" (with C. Naiman). Next Generation Information Technologies and Systems, June 1993.
29. "Semantic Communication Protocols for Heterogeneous Database Systems" (with C.Naiman). Workshop on Information Technologies and Systems, June 1993.
30. "Semantic Mechanisms for Cooperation in Heterogeneous Database Systems". **1992** International IEEE Conference on Man and Cybernetics, October 1992.
31. "Scalable Self-Configuring Integration of Localization and Indexing in Wireless Ad-hoc Sensor Networks," in Proc. of the 7th IEEE International Conference on Mobile Data Management (MDM'06), Nara, Japan, 2006.
32. "Self-Balancing Selective Information Dissemination and Discovery in Mobile Environments," IEEE International Conference on Data Engineering (ICDE), March 2006, Atlanta, p120-130.
33. "Tolerance of Imprecision in Efficiently Managing Sensor Databases", at the International Conf. on Data Management, Baltimore, Maryland, June 2005
34. "P2P Computing and Agent Technologies: Convergence of Technologies and Socio-Economic Characteristics on the Web" **AAMAS**, Bologna, July, 2002.
35. "Future of Mobile Computing", **ICIS**, Barcelona, December, 2002.
36. Workshop on Research Issues in Data Engineering, Heidelberg, Germany, April 2001. "Electronic Commerce Infrastructures: Current state and research issues"
37. "Convergence of Information Technologies in Organization Structures". University of Stuttgart, Germany. April 2001
38. "A Framework for a Scalable Architecture of Cooperative Information Agents" German National Research Center, University of Marburg. End of April 2001.
39. "Arbitration Protocols for Competing Software Agents" University of Bologna.
40. "Cooperation Amongst Heterogeneous Knowledge Sites". Panelist at "Three-Faceted View of Information Systems", **CoopIS'98 and WITS'98, Helsinki, Finland.**
41. "SCOPES: A Multi-Agent Architecture for Semantic Interoperability Amongst Autonomous and Heterogeneous Knowledge Sites", **Univ. Paris-Dauphine, France.** June 1998.
42. "The G-Tree: Analysis of Performance", **Int. Conference of Information Knowledge Management, Maryland**, Nov. 1996.
43. "Ontologies are not the panacea in data integration: A common flexible mediator to build context in heterogeneous information systems" invited speaker **Workshop in Cooperative Intelligent Agents**, 1997, Kiel, Germany, 1997.

44. "Plausible Interference of Context on Heterogeneous on Information Systems". Workshop on Information Technology Systems, Amsterdam, Dec. 1995.
45. "UIC Educational and Consulting Support at UIC Center for Urban Business". At the AT&T and Chicago Chamber of Commerce sponsored Workshop, Chicago State University, August 9, 1995.
46. "Impacts of Organizational Learning on Organizational Structure", at INFORMS(Institute for Operations Research and Management Sciences) Meeting, Los Angeles, 1995.
47. "Modeling Organizational Learning", at the Workshop on Mathematical and Computational Organization Theory, Los Angeles, 1995.
48. "World Market Opportunities, Be There Now" at The Chicago World Trade Conference, 1994, Panelist "Corporate Global Information Systems"
49. "Semantic Communication Protocols for Heterogeneous Database Systems" Workshop on Research Issues on Data Engineering, Vienna, Austria, and invited talk, Kaiserslautern University, 1993.
50. "Termination of Programs in Constraint Query Languages" at the 1994 ACM Symposium on Applied Computing, Phoenix, Arizona.
51. "A Mathematical Programming Approach to Query Satisfiability and Subsumption" at the ORSA/TIMS Meeting, November 1992.
52. "The Nested Interpolation-Based Grid Files" at the Mathematical Fundamentals of Database and Knowledge Base Systems, Rostock, Germany, May 1991.
53. "Query Processing Issues and Object-Oriented Databases" Northwestern University, invited talk, April 1990.
54. "An Anticipatory Scheme for Managing Concurrent database Operations in Interpolation-Based Grid Files" invited talk Kaiserslautern University, Germany, June 1990.
55. "Query Processing Issues in Lattice-Based Object-Oriented Databases" invited talk at Texas Instruments, Dallas, Texas, June 1989 and Kaiserslautern University, Germany, September 1989.
56. Panelist on "Algorithm Visualization" at the 1989 International Conf. On Computer Assisted Learning.
57. "The Anatomy of an Object-Oriented Visualization System for Algorithm Design" at the International Conf. On Computer-Aided Learning, Dallas 1989.
58. "Parallel Algorithms for the Optimization of Relational Queries" invited talk at Digital Equipment Corporation, Colorado Springs and Georgia Tech, Atlanta, Georgia, May 1988.
59. "Programming Languages and Object-Oriented Databases" invited talk, KFUPM, 1987.
60. "Design of a Natural Language System" invited talk KFUPM, 1986.
61. "Partionnement Dynamique Preservant l'Ordre pour les Machines de Donnees" invited talk at INRIA, Institut de la Recherche en Informatique et Automatique, January 1985.
62. "Structural Techniques Applied to Radar Signature Recognitions" University of California at San Diego May 1984.
63. "A Data Partition Scheme for the Parallel Execution of Relational Database Operations" invited talk at Northwestern University and the Illinois Institute of Technology
64. "Storage Mappings" at the PODS Conference Atlanta, Georgia.
65. "The Interpolation-Based Grid File" at the PODS Conference Portland, Oregon.