



MICHALIS VAZIRGIANNIS

CURRICULUM VITAE

PERSONAL DATA

Surname/Name: Michalis Vazirgiannis
Birthdate: 10/07/1964
Marital Status: Married, two children
Email: mvazirg@aueb.gr
WWW: www.db-net.aueb.gr/michalis

ACADEMIC POSITIONS

2008-.. Visiting Professor, Ecole Polytechnique, France
2004-... Associate Professor, Dept. of Informatics, Athens Economic University. Athens, Greece.
2001-2004: Assistant Professor, Dept. of Informatics, Athens Economic University. Athens, Greece.
1997- 2001: Lecturer, Dept. of Informatics, Athens Economic University. Athens, Greece.

CURRENT RESEARCH INTERESTS

- *Distributed Data Mining*: P2P content organization searching and ranking, semi-supervised learning, stability based feature selection.
- *Semantic media content management*: Spectral aspects of the web graph and its evolution, predictive model learning for graph data (web, social networking), dimensionality reduction, ranking algorithms and extensions.

PAST RESEARCH WORK

- Data & Web Mining: clustering validity measures, Word Sense Disambiguation for document classification, Web personalization, semantic organization and retrieval of web collections.
- Databases: data centric approaches to mobile computing, Spatiotemporal database models
- Multimedia Systems: Interactive multimedia documents, multimedia document indexing and rendering

RESEARCH POSTS & ACADEMIC ACTIVITIES

2008-2009 Part time visiting Professor, Ecole Polytechnique, France
2008-2010 Marie Curie Reintegration Grant, IMIS/Athena Research Center
2006–2007 Marie Curie postdoctoral fellow, GEMO team, INRIA/FUTURS, France
2-10/2004 Invited researcher *Max Plank Institute for Informatics* (Prof. Weikum's group – Saarbruecken, Germany)
1/2004 Invited consultant at *IBM India Research Laboratories* (Delhi, India)
2001-2002: Postdoctoral scientist, *INRIA-Rocquencourt Project VERSO*, Paris, under the ERCIM fellowship scheme
6-10/1998: Postdoctoral scientist, *INRIA-Rocquencourt Project VERSO*, Paris, in the framework of TMR-CHOROCHRONOS project
3-10/1997: Postdoctoral Scientist, *FernUni - Hagen (Germany)*, in the framework of TMR-CHOROCHRONOS project
<http://www.dbnet.ntua.gr/projects/chorochronos.html>.

- 6-10/1996: Guest Scientist, *GMD* - German National Research Center for Information Technology GmbH (Institute for Integrated Publication and Information Systems), Darmstadt, *Germany*.
- 1995- 98: Research Associate, Knowledge & Database Lab, Dept. of Electrical & Comp. Engineering, National Technical University of Athens, Greece.

EDUCATION

High School:

1976-82: Protipos Eyageliki School / Nea Smirni, Greece (18,92/20).

Higher:

1982-86: B.Sc. Physics, University of Athens, Greece (8,10/10).

Graduate:

1986-88: *M.Sc.*, Electronic Automation, University of Athens, Greece (8,00/10).

1988-89: *M.Sc.* Knowledge Based Systems, Herriot-Watt University, Edinburgh, UK.

1990-94: *Ph.D.*, "An Object Oriented Model for Representation of Hypermedia Information Networks, Enriched With Fuzzy Knowledge Structures", Dept. of Informatics, University of Athens, Greece.

FELLOWSHIPS, AWARDS

- *MARIE CURIE Reintegration Fellowship* – thematic focus: P2P web search - 2008
- *MARIE CURIE FELLOWSHIP* for research work in INRIA Paris – thematic focus: P2P web search - 2005
- ERCIM Fellowship (European Research Council for Informatics and Mathematics), 2001.
- *Post-doctoral fellowships* from the TMR-Chorochronos research network to visit INRIA - Paris and Fernuni-Hagen (Germany) (1997-98)
- *ERCIM Fellowship* (European Research Council for Informatics and Mathematics), 1997. Awarded but not accepted.
- Awards from the Greek Ministry of Education for the academic years 1980-81, 1981-82.
- Greek Fellowships Foundation (IKY) awards for the academic years 1983-84.
- Postdoctoral fellowship from Valsamakis Foundation for the years 1986-88.
- Award from the AI. ONASIS foundation (1989).

SCIENTIFIC DISTINCTIONS

- **Programme co-chair** of the "European Conference on Machine Learning" (ECML) and "European Conference on Principles and Practice of Knowledge Discovery in Databases" (PKDD), 2011, Athens, Greece
- Invited participant in the **GOOGLE EMEA** (Europe-Middle East-Africa) faculty forum (Google Research Labs, Zurich), February, 2008.
- He received the "*Outstanding Contribution award*" for his participation in the **ECML/PKDD 2007 Discovery Challenge** competition
- His paper **A foundation for representing and querying moving objects** is the **top ACM/TODS** journal paper for the decade 1994-2003 with regards to citations (see: <http://dbs.uni-leipzig.de/projekte/DATAINT/tods2.html>)
- Dec 2005: Our research prototype system "*Mining Medical Epidemiological Data*" is adopted by the by the Greek system for Surveillance and Antimicrobial Resistance (member of the WHO (World Health Organization))

/initiative Whonet): <http://www.mednet.gr/whonet/> (link: "Medical Data Mining -Association Rules")

- (August 2004) Our prototype system THESUS (see [J11, J12]) was selected to be presented in the special Exhibition on Innovative Products organized in the context of the Olympic Games 2004.

ACADEMIC SUPERVISION DISTINCTIONS

- (March 2009) His PhD graduates A. Vlachou and C. Doulkeridis receive the ERCIM postdoctoral fellowship.
- (June 2004) His PhD student C. Doulkeridis won the 2nd prize in the Michael Dertouzos competition in the 14th World Congress on Information Technology
- (February 2004) His student Dr. M. Halkidi has been awarded an international fellowship in the MARIE CURIE framework for postdoctoral studies in the Univ. of California - USA

UNIVERSITY TEACHING EXPERIENCE

Independent Teaching

- "Data Bases" postgraduate course, LIX - Ecole Polytechnique, France (2008-2010)
- "Advanced Topics in Information Systems: Web Mining", PhD Course, Dept of Informatics & Mathematics, *Deusto Univ*, Bilbao, Spain, (2006-2009).
- "Data Mining & Machine Learning", *Postgraduate Course*, Dept. of Informatics, Athens Economic University. Athens, Greece, (2009)
- "*Data & Web Mining*", Dept. of Informatics, Athens Economic University. Athens, Greece, (1999-2010)
- "*Data Bases*" – *Postgraduate Course*, Dept. of Informatics, Athens Economic University. Athens, Greece, (1997-2003 & 2009)
- "*Advanced Data Bases & Information Retrieval*" – *Postgraduate Course*, Dept. of Informatics, Athens Economic University. Athens, Greece, (2004-2008)
- "File Structures", "*Multimedia Systems*", Dept. of Informatics, University of Piraeus, Athens, Greece (1996).
- "*Data Bases I*", Dept. of Informatics, Athens Economic University, Athens, Greece, (1995-2003 & 2008-2010).
- "*Data Bases II*", Dept. of Informatics, Athens Economic University, Athens, Greece, (1998-1999).
- "*Software Engineering*" Dept. of Informatics, Athens Economic University, Athens, Greece, (1999-2000).

Contribution to Under and Postgraduate Courses

- "Object Oriented Software Development", Dept of Informatics, University of Athens, Greece (1992-95, 1996-97).
- "Multimedia Systems" (Postgraduate Course) Dept. of Informatics, University of Athens, Greece (1993-94).
- "Non-traditional Data Base Systems" (instructor T. Sellis), Postgraduate Programme, in Dept. of Electrical & Comp. Engineering, National Technical University of Athens, (1994-96).

MEMBERSHIP IN PROFESSIONAL ORGANISATIONS

- Member of the Institute of Electrical and Electronic Engineers (IEEE) until 2001.
- Member of the Association for Computing Machinery (ACM) until 2005.

PhD, MSc and DIPLOMA THESIS SUPERVISION

- *Phds (completed)*:

1. G. Tsatsaronis, "Text Mining for Information Retrieval" (2004- 2009) - currently post-doc fellow at NTNU, Norway.
 2. D. Mavroeidis, "Data Mining Theoretical issues" (2004- 2009) currently researcher at ISPR/Joint Research Center.
 3. A. Vlachou "Distributed Query processing" (2005 - 2008) – currently ERCIM fellow in NTNU, Norway.
 4. Doukeridis, "Organizing and Searching Data in Unstructured P2P Networks" (2003 - 2007) - currently ERCIM fellow in NTNU, Norway.
 5. M. Eirinaki, "Web mining for Personalization" (2001-2006) – currently Assistant Prof at San Jose State Univ, California, USA
 6. I. Varlamis, "WWW content management and mining" (1998 –2003), currently Lecturer at Harokopion Univ.
 7. M. Halkidi, "Uncertainty Handling in Data Mining" (1999 –2003) – currently Lecturer at Univ. of Pireaus.
- *Current PhD students*
 1. N. Salamanos, "Learning in P2P architectures" (2005-...)
 2. P. Magdalinos, "Distributed Dimensionality Reduction Algorithms" (2006-...)
 3. E. Voudigari, "Predictive Learning for the Web Graph"
 4. M. Karkali, "Real time Web Personalization"
 - External examiner in international PhD committees
 1. C. Berberich, U. Saarbruecken/Max Planck Institute, Germany (2009)
 2. C.Constantin, Universite Pierre et Marie Curie (Paris VI), France (2007)
 3. M. Theobald, U. Saarbruecken/Max Planck Institute, Germany (2006)
 4. C. du Mouza, CNAM, Paris, France (2005)
 5. B. Ngyen, project ORSAY (Prof. S, Abiteboul), France (2003)
 - *MSc theses*: More than twenty (20) theses supervised in the MSc Programmes "Information Systems" and "Computer Science" of the dept of Informatics in Athens University of Economics & Business in the period 1997-2009.
 - *Diploma theses*: I have supervised seven (7) diploma thesis in the Dept. of Informatics, Univ. of Athens, two (4) in the National Technical University of Athens, two (2) in the Dept. of Informatics, University of Piraeus and more than 20 in the dept of Informatics at Athens University of Economics & Business.

Many of them resulted in Conference and Journal Publications.

TUTORIALS IN INTERNATIONAL CONFERENCES

- (with D. Gunopulos, and M. Halkidi), "From Unsupervised to Semi-supervised Learning: Algorithms and evaluation approaches", ECML/PKDD 2006, Conference on Data Mining. Berlin, Germany.
- (with D. Gunopulos, and M. Halkidi), "From Unsupervised to Semi-supervised Learning: Algorithms and evaluation approaches", SIAM Conference on Data Mining 2006, USA.
- (with M. Eirinaki), Web Mining for Web Personalization, tutorial, ECML/PKDD 2005, Porto, Portugal.
- (with M. Halkidi) "An Introduction to Quality Assessment in Data Mining", PKDD 2002, Helsinki, Finland, August 2002.
- Sept. 2001, Tutorial "Data Mining Techniques and Tools for Information Filtering" in Advances in Databases and Information Systems (ADBIS') 2001 conference. Vilnius, Lithuania.

INVITED TALKS (not including Conference presentations)

2009

- "Online Web personalization", Bell Labs/INRIA workshop on "Fundamentals of Telecommunications II" in Rocquencourt, **France**

2008

- "Predictive modeling for large evolving graphs - the case of WWW" – Telefonica Research Labs, November 2008, Barcelona, **Spain**

2007

- "Web Rank Prediction based in Markov models", INRIA FUTURS, February 2007, INRIA/FUTURS, Paris, **France**.
- "Model learning for Web ranking predictions", LIP6, Univ. Paris VI, France, March 2007, **France**.

2006

- P2P Web Search: Challenges and opportunities", INRIA FUTURS, October 2006, Paris, **France**.
- P2P Web Search based on Semantic Overlay Networks", Univ. of Versailles, June 2006, **France**.
- "Semantic Overlay Networks for P2P Web Search", The Future of Web Search, *Yahoo! Research*, May 19-20, 2006, Barcelona, **Spain**
- "K-Landmarks: a novel method for distributed dimensionality reduction", Max Planck Institute for Informatics, Saarbruecken **Germany**, May 17th, 2006
- "P2P Web search – Requirements and prototype solutions", The Sixth International Workshop on Pattern Recognition in Information Systems PRIS-2006, May 23-24, 2006 – Paphos, **Cyprus**
- "PageRank and Innovative aspects", Univ.of Crete, May 5th, 2006
- "PageRank (change rate) prediction – as a classification problem", Algorithmic and Numerical Aspects in Web Search (ANAW) 2006, *Ask.com* & Univ. o Pisa, Feb 7-9, 2006, **Italy**

2005

- (with M. Eirinaki) "Introducing Semantics in Web Personalization - The role of ontologies", International Workshop on Knowledge Discovery and Ontologies (KDO-2005), held within ECML/PKDD 2005, Porto, **Portugal**, October 7, 2005
- "Semantic Overlay Generation in a P2P Architecture", 8th International Workshop of the DELOS Network of Excellence on Digital Libraries on Future Digital Library Management Systems (System Architecture & Information Access) Schloss Dagstuhl, **Germany**, March 29 - April 1st,
- "Web Mining – an Introduction", University of Deusto, **Spain**, March 2005
- "P2P distribute & decentralized overlay generation", DELOS workshop, Dagsthul, **Germany**, April 2005

2004

- "THESUS – Web content management with semantics and hypelinks", Max Planck Institute for Informatics, Saarbruecken, **Germany**, May 2004
- "Clustering validity approaches", IBM India Research Laboratory, **India**, Jan. 2003
- "THESUS: Web content management enhanced with semantics", IBM India Research Laboratory, **India**, Jan. 2003

2003

- "Spatial Data Mining", University of the Aegean, **Greece** Nov. 2003

- "Web Document Clustering algorithms – a survey", NEMIS 2003 Launch Conference, Patras, **Greece**

2000

- Aug. 2000: AT&T Research Laboratories, "Clustering validity measures", New Jersey, **USA**
- Sep. 2000: Dept of computer science, Aalborg University, "Clustering validity measures", **Denmark**

1999

- December 1999: Greek Public Radio & Television corporation (ERT), "Introduction to Multimedia Technologies & the WWW", Athens, **Greece**
- June 1999: IEEE-Multimedia Systems Conference, Tutorial "Interactive Multimedia Documents: Modeling, Integrity, Authoring and querying", Florence, **ITALY**
- January 1999, "The role of uncertainty in the data mining process", IFIP WG2.6 meeting in Rotorua, **New Zealand**.

1998

- October 1998, "Interactive Multimedia Documents: Modeling and Rendering: Implementation Experiences", Politecnico di Milano, Milano, **Italy**.
- September 1998: "Interactive Multimedia Documents: Modeling and Rendering: Implementation Experiences", INRIA/Grenoble, **France**.
- August 1998, "Non Traditional Data Models: Interaction, Space+Time", IGIP WG 2.6 (Databases) meeting, New York, **USA**
- June 1998: IEEE-Multimedia Systems Conference, Invited talk "Authoring Multimedia Documents", Austin-Texas, **USA**
- February 1998: "Interactive Multimedia Documents: Modeling and Rendering: Implementation Experiences", University of Illinois at Chicago (Prof. O. Wolfson), Chicago, **USA**

1997

- October 1997: "Interactive Multimedia Documents: Modeling and Rendering: Implementation Experiences", GMD/IPSI (Prof. E. Neuhold), Darmstadt, **Germany**.
- June 1997: "Interactive Multimedia Applications: Interactive Scenaria Modeling and Rendering", Multimedia Comm. Research Laboratory (Prof. N.Georganas), Department of Electrical Engineering, University of Ottawa, **Canada**.
- June 1997: "Spatio Temporal Relationships: a potential challenge?", National Center for Geographic Information and Analysis and Department of Spatial Information Science and Engineering (Prof. M.J. Egenhofer), Department of Computer Science, University of Maine, Orono, **USA**.
- Feb. 1997: "Interactive Multimedia Applications, Database issues", Dept. of Computer Science, University of Crete, **Greece**.

1996

- Sep. 1996: "Events In Interactive Multimedia Applications: Modeling And Implementation Design", Data Base Group (Prof. Alex. Buchmann), Technical University of Darmstadt, **Germany**.
- Sep. 1996: "Modeling of Interactive Multimedia Scenarios", University of Navarra (Prof. Maria Perez Luque), **Spain**.
- Aug. 1996: "Composition & Indexing schemes for Large Multimedia Applications", Distributed Multimedia Systems Lab (J. Buford), Univ. of Mass., Lowell, MA, **USA**.
- Aug. 1996: "Composition & Indexing Schemes for Large Multimedia Applications", Media & Communications Lab (T.D.C. Little), Boston University, MA, **USA**.

1995

- Nov. 1995: "Multimedia Technology, Overview", Dept. of Informatics, University of Pireaus, **Greece**.
- May 1995: "Multimedia Application Modeling: An Object Oriented Approach", GMD/IPSI, Darmstadt, **Germany**.

1994

- May 1994: "Multimedia Systems, Review and trends", Workshop in "Multimedia for Education", Greek Society of Physicists, Athens, **Greece**.
- March 1994: "Hypermedia Modeling using Fuzzy Logic", Informatics Institute, DEMOCRITUS, Athens, **Greece**.

EXTERNAL SERVICES

Journal Editorial Boards

Member of the Intelligent Data Analysis Journal (IOS press),
<http://www.iospress.nl/html/1088467x.php>

Conference Program Committee Member

2011

- European Conference on Machine Learning (ECML) and European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD), Athens, Greece
Programme co-chair & Organizer

2010

- Third ACM International Conference on Web Search and Data Mining (WSDM) 2010
- EDBT 2010 (13th International Conference on Extending Database Technology).

2009

- IEEE – International Conference on Data Mining 2009, Miami, USA
- IEEE - International Conference on Data Engineering, 2009, Shanghai, China
- World Wide Web Conference 2009 , Madrid, Spain
- World Wide Web Conference 2009 poster track, Madrid, Spain
- The 1st International Conference on Sensor Networks Applications, Experimentation and Logistics, 24-25 September 2009 - Athens, Greece
- IEEE-ASONAM2009: The 2009 International Conference on Advances in Social Network Analysis and Mining , Athens, Greece
- 2nd Artificial Intelligence Techniques in Software Engineering Workshop, 22-23 April 2009 , Thessaloniki, Greece – **Program co-chair**

2008

- «Artificial Intelligence Techniques in Software Engineering» Workshop, at the 18th European Conference on Artificial Intelligence, **programme co-chair**
- 19th European Conference on Machine Learning (ECML) and the 12th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD), **area chair**
- IEEE International Conference on Data Mining 2008, Pisa, Italy, **PC vice-chair**

2007

- 1st Workshop on Large-Scale Distributed Systems for Information Retrieval (LSDS-IR), collocated with ACM SIGIR 2007

- The Fifth International Symposium on Parallel and Distributed Processing and Applications (ISPA07), Canada 2007
- 6th Hellenic Data Management Symposium , Athens, July 2007
- AAAI 2007: National Conference on Artificial Intelligence. Vancouver, British Columbia, Canada
- 18th European Conference on Machine Learning (ECML) and the 11th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD)
- "Data Mining and Knowledge Discovery" Stream in EURO XXII - 2007 European Conference on Operational Research Prague, Czech Republic, July 8-11, 2007
- 11th International Conference on User Modeling (UM 2007), 25 to 29 of June 2007, Corfu, Greece

2006

- P2PIR 2006 Workshop on Information Retrieval in Peer-to-Peer Networks, Arlington, USA, November 11, 2006
- WISE 2006: The 7th International Conference on Web Information Systems Engineering, Wuhan, China, October 23-26, 2006
- ACM/WIDM 2006, 8th ACM International Workshop on Web Information and Data Management (WIDM 2006)
- November 10, 2006, USA ECML-PKDD 2006 European Conference on Machine Learning - European Conference on Principles and Practice of Knowledge Discovery in Databases
- ACM/KDD 2006, The Twelfth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining
- ACM-IEEE/MDM 2006, 6th International Conference on Mobile Data Management (MDM'05) OMOIO
- ICEIS 2006 - 8th International Conference on Enterprise Information Systems, Paphos, Cyprus from 23 to 27, May 2006
- Special Track on Data Mining, The 21st ACM Symposium on Applied Computing 23-27 April 2006, Dijon, France

2005

- ER -2005, 24rd International Conference on Conceptual Modeling (ER2004)
- ACM-IEEE/MDM 2005, 6th International Conference on Mobile Data Management (MDM'05)
- IEEE/ICDE 2005, 21st International Conference on Data Engineering (ICDE 2005) - Call for Demonstrations
- SSTD05 , 9th International Symposium on Spatial and Temporal Databases

2004

- ACM-GIS'04 - The 10th ACM International Symposium on Advances in Geographic Information Systems, November 8-9, 2002
- ACM - DocEng 2004 - The ACM Symposium on Document Engineering,
- ER2004 - 23rd International Conference on Conceptual Modeling (ER2004)
- Hellenic Data Management Symposium HDMS - 2004
- PARMA 2004 - From Data to Patterns: Int'l Workshop on Pattern Representation and Management 2004

2003

- Very Large Data Bases Conference 2003, Berlin. Germany.
- 15th International Conference on Scientific and Statistical Database Management, 2003, Boston, USA
- ACM-MMDB 2003, The First ACM International Workshop on Multimedia Databases New Orleans, Louisiana, USA, November 7, 2003
- ACM-CICM 2003, ACM International USA, November 7, 2003

- The ACM Symposium on Document Engineering, Grenoble, France, November, 2003

2002

- ACM DocEng 2002 - The ACM Symposium on Document Engineering, McLean, VA, USA November 8-9, 2002.
- HDMS 2002 - 1st Hellenic Data Management Symposium, Athens, Hellas, July 18-19, 2002.
- ACM-GIS'02 - The 10th ACM International Symposium on Advances in Geographic Information Systems, November 8-9, 2002
- International Symposium on Methodologies for Intelligent Systems (ISMIS) '02 Symposium, Lyon, France

2001

- International Workshop on Mining Spatial and Temporal data, in conjunction with the Fifth Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-01)
- IEEE-International Conference on Multimedia Systems, 2001, Japan
- MMM 2001- The 8th International Conference on Multimedia Modelling 2001, Amsterdam, The Netherlands
- ACM Symposium on Document Engineering, Atlanta, Georgia, USA, 2001

2000

- IEEE-International Conference on Multimedia Systems & Expo, 2000
- Multimedia Information Systems Workshop 2000, Chicago
- IDA2000, International Workshop on Interacting with Databases, in conjunction with the 11th DEXA2000

1996-99

- ECAI '96 Workshop: Knowledge Representation For Interactive Multimedia Systems: Research And Experience (KRIMS'96), Budapest, Hungary, Aug. 1996.
- 6th Hellenic Conference on Informatics and Communications, Oct. 1997, Salonica, Greece.
- Third Annual Workshop on Multimedia Information Systems, Como, Italy, Sept. 1997.
- IFIP DS-8, Conference on "Semantic Issues in Multimedia Systems", New Zealand, Jan 1999

Journal Reviews

- IEEE-Transactions on Data and Knowledge Engineering
- Journal of Intelligent and Fuzzy Systems, Wiley.
- Information Systems Journal, Elsevier Publishers
- IEEE Multimedia Magazine
- IEEE Transactions on Multimedia Systems

Conference Reviews

- ACM/SAC 1998 and 199, CICM 98, IADT 98, Very Large Databases (VLDB) Conference 1996 - Additional Reviewer, International Conference on Information and Knowledge Management (CIKM'95) Conference, Conference on Advanced Information Systems Engineering (CAISE '96).

Services to governmental institutions

- *2001-2003: Greek Social Security Institute.* Member or president of technical committees dealing with requirements analysis, technical specifications, and evaluation of proposals for international tenders in the area of Health Information Systems.
- *2001-2003: Greek Social Security Institute.* Consulting Services on planning, implementation and evaluation of large scale information systems.

SELECTED RESEARCH PROJECTS

Dr. Vazirgiannis has founded and leads the "DB-NET - Research team on Data & Web Mining". He is leading local research teams in several competitive international research projects (i.e. EU/IST projects) and has attracted more than 1.3MEuro funding in the last 8 years. He is leading also industrial projects in the area of complex B2B systems in the area of tourism.

Scientific person in charge

- (2006 – 2008) IST/SQO-OSS(IST-2005-33331): Source Quality Observatory for Open Source Software - subcontractor. Data Mining methodologies for metrics in software repositories.
- (2001 – 2004) - IST/h-TechSight (IST-2001-33174) – subcontractor. Web Mining for Chemical Engineering Portals.
- (2001-2004) - IST/NEMIS (IST-2001-37574)- subcontractor. Text Mining Excellence Network.
- (2001-2004) IST/FET/PANDA thematic network, Research on Pattern Based DBMSs
- (2001-2003) IST/FET-OPEN/DBGlobe: A Data-centric Approach to Global Computing,
- (2001-2003) IST/i-KnowUMine, Web Site Restructuring based on usage knowledge
- (2000-2001) HELDINET: a human network for information dissemination
- (1999-2001) PENED/GSRT: Research & Development for Knowledge Discovery in Medical Data (with Medical School, Univ. of Athens), Scientist in charge.
- (1999-2001) Bilateral Cooperation between Greece and Germany. The objective of the project is research in the area of uncertainty management in the area of spatial and temporal database systems.
- (1999-2001) Bilateral Cooperation between Greece and France. The objective of the project is research in the area of interactive distributed multimedia systems.
- (1998-99) ESPRIT/VRShop (subcontractor), "Virtual reality support for e-commerce applications", Scientist in charge. VR-Shop Project wins DigiGlobe European Esprit Project VR-Shop, has won the prestigious 1999 prize award by Deutsche Telekom and news German magazine Focus for innovation in the fields of science, technology and multimedia

RESEARCH PROTOTYPE SYSTEMS

- THESUS – Similarity measures for thematic Subsets of the WWW, *patent* registered until 2006(No. 2003-01-00216, at the Greek Industrial Property Organization)
- SEWEP - Using Site Semantics and a Taxonomy to Enhance the Web Personalization Process
- UMINER - A Data mining system that handles uncertainty and quality - *patent* registered until 2006 (No. 2003-01-00338, at the Greek Industrial Property Organization)
- OMIOTIS: Semantic Similarity among terms / phrases, available at: <http://83.212.240.72/WebSite/>

PUBLICATIONS

Books

- M. Vazirgiannis, M. Halkidi. "Data & Web Mining ", Gutenberg publishers, 2003, ISBN: 402116 (in Greek) – 2nd edition extended, 2006.
- M. Vazirgiannis, M. Halkidi, D. Gunopoulos, "Quality Assessment and Uncertainty Handling in Data Mining", Springer-Verlag, LNAI Series, 2003, ISBN: 1-85233-655-2.
- M. Vazirgiannis, "Interactive Multimedia Documents", Springer-Verlag, LNCS Series #1564, ISBN: 3-540-66711-3.

Invited Encyclopedia Articles

- M. Vazirgiannis, "Clustering Validity" in Ling Liu and M. Tamer Özsu (Eds.) Encyclopedia of Database Systems, Springer Verlag, 2008.
- M. Vazirgiannis, "Data Modeling - Object-Oriented Data Model", Encyclopedia of Information Systems, Academic Press, 2002.

Book Contributions

- B1. Christos Doulkeridis, Akrivi Vlachou, Kjetil Nørvg, Michalis Vazirgiannis. Distributed Semantic Overlay Networks. In Handbook of Peer-to-Peer Networking, Springer (to appear), April 2009
- B2. "Quality Assessment Approaches in Data Mining" in Data Mining and Knowledge Discovery Handbook, Springer, DOI 10.1007/0-387-25465-X_30 Pages 661-696, Collection Computer Science SpringerLink, May 28, 2006
- B2. N. Oikonomakou, M. Vazirgiannis, "A Review of Web Document Clustering Approaches", in Data Mining and Knowledge Discovery Handbook, Springer, DOI 10.1007/0-387-25465-X_30 Pages 921 - 937, Collection Computer Science SpringerLink, May 28, 2006
- B3. Pernici, A. Vakaloudis M. Vazirgiannis, I. Mirbel, "Advanced applications for spatio-temporal databases", in the book "Spatio-Temporal Databases: The CHOROCHRONOS Approach, T. Sellis et. al. (eds.), LNCS Vol. 2520, Springer.
- B4. M. Vazirgiannis, T. Sellis, "Multimedia Data Base Management Systems: Modeling and Querying Interactive Multimedia Documents", in "Advanced Databases" (Editors, M. Piattini, O. Diaz), Artech House, 2000.
- B5. M. Vazirgiannis, "Multimedia Data Base Object and Application Modeling Issues and an Object Oriented Model" in the book "Multimedia Database Systems: Design and Implementation Strategies " (editors K. C. Nwosu, B. Thuraisingham and P. B. Berra), Kluwer Academic Publishers, pp. 208-250, 1996.

Refereed International Journals

- J1. Akrivi Vlachou, Christos Doulkeridis, Yannis Kotidis, Michalis Vazirgiannis. "Efficient Routing of Subspace Skyline Queries over Highly Distributed Data", to appear in *IEEE Transactions on Knowledge and Data Engineering (TKDE)*.

- J2. Christos Doulkeridis, Akrivi Vlachou, Yannis Kotidis, Michalis Vazirgiannis. "Efficient Range Query Processing in Metric Spaces over Highly Distributed Data. In Distributed and Parallel Databases (to appear)
- J3. Christos Doulkeridis, Akrivi Vlachou, Kjetil Nørkvåg, Yannis Kotidis, Michalis Vazirgiannis. "Efficient Search based on Content Similarity over Self-Organizing P2P Networks", in Peer-to-Peer Networking and Applications, Springer (to appear).
- J4. Christos Doulkeridis, Michalis Vazirgiannis, "CASD: Management of a Context-Aware Service Directory", *Pervasive and Mobile Computing* 4(5): 737-754 (2008)
- J5. M. Halkidi, M. Vazirgiannis. "A Density-based Cluster Validity Approach using Multi-representatives", *Pattern Recognition Letters* 29(6): 773-786 (2008)
- J6. M. Halkidi, M. Vazirgiannis. "NPClu: An approach for clustering spatially extended objects", *Intelligent Data Analysis Journal*, IOS press, Volume 12, Number 6 (2008).
- J7. M. Halkidi, D. Gunopulos, M. Vazirgiannis and C. Domeniconi, "A Clustering Framework based on Subjective and Objective Validity Criteria", accepted for publication in the *ACM Transactions on Knowledge Discovery from Data Journal (ACM-TKDD)*, 1(4), 2008.
- J8. Magdalini Eirinaki and Michalis Vazirgiannis, "Web Site Personalization based on Link Analysis and Navigational Patterns", in *ACM Transactions on Internet Technologies*, Vol. 7 No. 4, October 2007.
- J9. C. Doulkeridis, K. Norvag, M. Vazirgiannis, "DESENT: Decentralized and distributed semantic overlay generation in P2P networks", in the Special Issue on Peer-to-Peer Communications and Applications, *IEEE Journal on Selected Areas in Communications*, Volume: 25 Issue: 1 Date: Jan. 2007, pages Page(s): 25-34.
- J10. Berberich K., Vazirgiannis M., Weikum G.: "Time-Aware Authority Ranking", in *Internet Mathematics journal*, 2(3), April 2006, <http://www.internetmathematics.org/>
- J11. I. Varlamis, M. Vazirgiannis, M. Halkidi, B. Nguyen, «THESUS: Effective Thematic Selection And Organization Of Web Document Collections Based On Link Semantics», in *IEEE Transactions on Knowledge and Data Engineering Journal*, June 2004 (Vol. 16, No. 6), pp. 585-600.
- J12. I. Varlamis, M. Vazirgiannis, I. Lazaridis, M. Papageorgiou, T. Panayiotopoulos. Distributed Virtual Reality Authoring Interfaces for the WWW: the VRSHOP case, in *Multimedia Tools & Appl. Journal*, 22(1): 5-30 (2004)
- J13. B. Nguyen, M. Vazirgiannis, I. Varlamis, M. Halkidi, "Organizing Web Documents into Thematic Subsets using an Ontology", in *VLDB journal Special Issue on "Semantic Web"*, VLDB J., 12 (4), 2003, pp.320-332.
- J14. E. Pitoura, S. Abiteboul, D. Pfooser, G. Samaras, M. Vazirgiannis, "DBGlobe: A Service-Oriented P2P System for Global Computing", *SIGMOD Record* 32(3): 77-82 (2003)
- J15. Magdalini Eirinaki, Michalis Vazirgiannis, "Web Mining for Web Personalization", in *ACM Transactions on Internet Journal*, (ACM TOIT), Vol.3 No. 1, February 2003
- J16. M. Halkidi, Y. Batistakis, M. Vazirgiannis, "On Clustering Validation Techniques", invited paper, in *Intelligent Information Systems Journal*, Kluwer Publishers, 2001
- J17. "A Foundation for Representing and Querying Moving Objects", R. H. Gueting, M. H. Boehlen, M. Erwig, C. S. Jensen, N. Lorentzos, M. Schneider, and M. Vazirgiannis, in *ACM-TODS journal*, 25(1), 2000.
- J18. I. Mirbel B. Pernici T. Sellis S. Tserkezoglou, M. Vazirgiannis, "Checking Temporal Integrity of Interactive Multimedia Documents", in *VLDB Journal* 9(2): 111-130, 2000.

- J19. Markousis, D. Tsirikos, M. Vazirgiannis, G. Stavrakas, "WWW-enabled delivery of Interactive Multimedia Documents", in Elsevier - Computer Communications Journal vol. 23(3), pp 242-252.
- J20. M. Vazirgiannis D. Tsirikos, Th.Markousis, M. Trafalis, Y. Stamati, M. Hatzopoulos T. Sellis, "Interactive Multimedia Documents: a Modeling, Authoring and Rendering approach", in Multimedia Tools & Applications Journal (Kluwer Academic Publishers), 12(2/3), pp. 145-188, 2000
- J21. M. Vazirgiannis, I. Kostalas, T. Sellis, "Spatial and Temporal Specification & Authoring of Multimedia Scenarios", in IEEE-Multimedia, September 1999
- J22. Martin Erwig, R. H. Güting, Markus Schneider & Michalis Vazirgiannis, Spatio-Temporal Data Types: An Approach to Modeling and Querying Moving Objects in Databases, GeoInformatica, 3(3), 269-296, 1999
- J23. E. Stefanakis, M. Vazirgiannis, T. Sellis, "Incorporating Fuzzy Set Methodologies in a DBMS Repository for the Application Domain of GIS", International Journal of Geographical Information Science, Volume:- 13 Issue:- 7, 30/09/99
- J24. M. Vazirgiannis, Y. Theodoridis, T. Sellis, "Spatio-Temporal Composition and Indexing for Large Multimedia Applications", in ACM/Springer-Verlag Multimedia Systems Journal, vol. 6(4), 1998.
- J25. M. Vazirgiannis, K. Petrou, A. Tsompanidis, M. Hatzopoulos. "An Object Oriented Framework for Knowledge representation based on Fuzzy sets", Intelligent and Fuzzy Systems Journal, Wiley, vol. 1 (pp. 265-278), 1994.
- J26. M. Vazirgiannis, C. Mourlas. "An object Oriented Model for Interactive Multimedia Applications", The Computer Journal, British Computer Society, vol. 36(1), 1/1993.

Other Journals

- J27. M. Halkidi, Y. Batistakis, M. Vazirgiannis. "Cluster Validity Methods: Part II", SIGMOD Record 31(3): 19-27 (2002)
- J28. M. Halkidi, Y. Batistakis, M. Vazirgiannis. "Cluster Validity Methods: Part I. SIGMOD Record 31(2): 40-45 (2002)

Refereed International Conferences

2009

- C1. P. Zacharouli, M. Titsias and M. Vazirgiannis, "Web Page Rank Prediction using PCA and EM Clustering", 6th Workshop on Algorithms and Models for the Web Graph (WAW2009), Barcelona
- C2. FEDRA: A Fast and Efficient Dimensionality Reduction Algorithm", P. Magdalinos, C. Doulkeridis, and M. Vazirgiannis, in the proceedings of the SIAM International Conference on Data Mining 2009, pp. 509-520.

2008

- C3. C. Doulkeridis, K. Nørnvåg and M. Vazirgiannis, "Schema-Assisted Peer Selection for XML Querying in Unstructured P2P Systems", In Proceedings of 7th ACM International Workshop on Data Engineering for Wireless and Mobile Access (MobiDE'08), Vancouver, Canada, June 13, 2008
- C4. A. Vlachou, C. Doulkeridis, K. Nørnvåg, M. Vazirgiannis, "Skyline-based Peer-to-Peer Top-k Query Processing", In Proceedings of 24th IEEE International Conference on Data Engineering (ICDE'08), Cancun, Mexico, April 7-12, 2008.
- C5. Michalis Vazirgiannis, Dimitris Drosos, Pierre Senellart, Akrivi Vlachou, "Web Page Rank Prediction with Markov Models", poster, WWW 2008, Beijing, China, April 2008
- C6. G. Tsatsaronis, I. Varlamis, M. Vazirgiannis, "Word Sense Disambiguation with Semantic Networks", to appear in Proceedings of the 11th

International Conference on Text, Speech and Dialogue, (TSD 2008), 8-12 September 2008, Brno, Czech Republic.

- C7. A. Vlachou, C. Doulkeridis, Y. Kotidis, "Angle-based Space Partitioning for Efficient Parallel Skyline Computation.", In Proceedings of ACM SIGMOD International Conference on Management of Data, Vancouver, Canada, June 2008.
- C8. A. Vlachou, C. Doulkeridis, K. Nørvåg, M. Vazirgiannis, "On Efficient Top-k Query Processing in Highly Distributed Environments", In Proceedings of ACM SIGMOD International Conference on Management of Data, Vancouver, Canada, June 2008.

2007

- C9. Dimitrios Mavroeidis, Michalis Vazirgiannis Stability based Sparse LSI/PCA: Incorporating Feature, Selection in LSI and PCA, to appear in the proceedings of the ECML/PKDD 2007 conference.
- C10. A. Vlachou, M. Vazirgiannis, "Link-based Ranking of Skyline Result Sets". In Proceedings of 3rd Multidisciplinary Workshop on Advances in Preference Handling (M-PREF) in conjunction with VLDB 2007, Vienna, Austria, September 23, 2007.
- C11. C. Doulkeridis, A. Vlachou, Y. Kotidis, M. Vazirgiannis. Peer-to-Peer Similarity Search in Metric Spaces. In Proceedings of 33rd International Conference on Very Large Data Bases (VLDB), Vienna, Austria, September 23-28, 2007.
- C12. A. Vlachou, C. Doulkeridis, D. Mavroeidis, M. Vazirgiannis. Designing a Peer-to-Peer Architecture for Distributed Image Retrieval. In Proceedings of 5th International Workshop on Adaptive Multimedia Retrieval (AMR), Paris, France, July 5-6, 2007.
- C13. K. Berberich, S. Bedathur, G. Weikum, M. Vazirgiannis, "Comparing Apples and Oranges: Normalized PageRank for Evolving Graphs", poster paper in the proceedings of WWW 2007, Canada
- C14. A. Vlachou, C. Doulkeridis, Y. Kotidis, M. Vazirgiannis, "SKYPEER: Efficient Subspace Skyline Computation over Distributed Data", in the Proceedings of the 23rd IEEE International Conference on Data Engineering (ICDE), Istanbul, Turkey, April 2007.
- C15. G. Tsatsaronis, M. Vazirgiannis, I. Andoutsopoulos, "Word Sense Disambiguation with Spreading Activation Networks Generated from Thesauri, in the proceedings of IJCAI 2007 , Hyderabad, India.

2006

- C16. P. Magdalinos, C. Doulkeridis, M. Vazirgiannis, "K-Landmarks: Distributed Dimensionality Reduction for Clustering Quality Maintenance", in the proceedings of the ECML-PKDD 2006 conference, Berlin.
- C17. C. Doulkeridis, K. Norvag, M. Vazirgiannis, "Scalable Semantic Overlay Generation for P2P-based Digital Libraries", Proceedings of 10th European Conference on Research and Advanced Technology for Digital Libraries (ECDL'06)
- C18. M. Vazirgiannis, K. Norvag, C. Doulkeridis, "Peer-to-Peer Clustering for Semantic Overlay Networks (invited paper)", The Sixth International Workshop on Pattern Recognition in Information Systems PRIS-2006, co-located with ICEIS 2006. Cyprus, May 2006.
- C19. C. Doulkeridis, K. Norvag, M. Vazirgiannis, "Schema Caching for Improved XML Query Processing in P2P Systems", The 6th IEEE International Conference on Peer to Peer Computing, Cambridge, UK
- C20. C. Doulkeridis, K. Norvag, M. Vazirgiannis, "The SOWES Approach to P2P Web Search using Semantic Overlays", In Poster Proceedings of the 15th World Wide Web Conference (WWW'06)
- C21. I. Azkue, A. Pina and M. Vazirgiannis, "Towards an Integrated Technological Framework for Modelling Shared Virtual Spaces: Languages and Domotic Applications", Articulated Motion and Deformable Objects: 4th

- International Conference, AMDO 2006, Port d'Andratx, Mallorca, Spain, July 11-14, 2006. LNCS Volume 4069 / 2006
- C22. P. Magdalinos, C. Doulkeridis, M. Vazirgiannis, "A Novel Effective Distributed Dimensionality Reduction Algorithm", in International Workshop on Feature Selection for Data Mining (FSDM'06), in conjunction with 2006 SIAM Conference on Data Mining April 22, 2006, Bethesda, Maryland
 - C23. K. Berberich, S. Bedathur, M. Vazirgiannis, G. Weikum, "BuzzRank ... and the Trend is your friend", In Poster Proceedings of the 15th World Wide Web Conference (WWW'06)
 - C24. K. Norvag, C. Doulkeridis, M. Vazirgiannis, "Taxonomy Caching: A Scalable Low-Cost Mechanism for Indexing Remote Contents in Peer-to-Peer Systems", Proceedings of IEEE International Conference on Pervasive Services 2006 (ICPS'06)

2005

- C25. D. Mavroeidis, G. Tsatsaronis, M. Vazirgiannis, M. Theobald, G. Weikum, "Word Sense Disambiguation for Exploiting Hierarchical Thesauri in Text Classification", in the proceedings of the ECML/PKDD 2005 Conference, Portugal
- C26. M. Halkidi, M. Vazirgiannis, "NPClu: An Approach for Clustering Non-point Objects", ECML/PKDD Workshop on Mining Spatio-Temporal Data (MSTD), Portugal, October, 2005
- C27. M. Eirinaki, M. Vazirgiannis, D. Kapogiannis, "Web Path Recommendations based on Page Ranking and Markov Models", ACM WIDM 2005, Nov. 5, Bremen, Germany
- C28. M. Halkidi, D. Gunopulos, N. Kumar, M. Vazirgiannis, and C. Domeniconi, "A Framework for Semi-Supervised Learning based on Subjective and Objective Clustering Criteria", in the proceedings of IEEE International Conference on Data Mining (ICDM 2005), Houston, USA
- C29. M. Eirinaki, M. Vazirgiannis, "Usage-based PageRank for Web Personalization", in Proc. of IEEE International Conference on Data Mining (ICDM 2005), November 2005, Houston, USA
- C30. C. Doulkeridis, N. Loutas, M. Vazirgiannis, "A System Architecture for Context-Aware Service Discovery", in the International Workshop on Context for Web Services (CWS'05) (Held in conjunction with the 5th International and Interdisciplinary Conference on Modeling and Using Context), Paris, France
- C31. C. Doulkeridis, V. Zafiris, M. Vazirgiannis, "The role of caching and context awareness in P2P Service Discovery", in the proceedings of the 6th International Conference on Mobile Data Management (MDM'05), Cyprus, May 2005
- C32. G. Tsatsaronis, R. Pitkaanen, M. Vazirgiannis, "*Clustering for Ontology Evolution*", 29th Annual Conference of the German Classification Society (GfKI 2005)

2004

- C33. D. Mavroidis, M. Tsatsaronis, "Semantic Distances for Sets of Senses and Applications in Word Sense Disambiguation", in the proceedings of the Knowledge Mining - NEMIS 2004 Final Conference, Athens, Oct. 2004
- C34. C. Doulkeridis, M. Vazirgiannis, "*Querying and Updating a Context-Aware Service Directory in Mobile Environments*", in the Proceedings of the 2004 IEEE/WIC/ACM International Conference on Web Intelligence (WI 2004), Beijing, China, September 20-24, 2004
- C35. S. Paulakis, C. Lampos, M. Eirinaki, M. Vazirgiannis, "*SEWeP: A Web Mining System supporting Semantic Personalization*", demo paper, in Proceedings of the ECML/PKDD 2004 Conference, Pisa, Italy, September 2004

- C36. K. Berberich, M. Vazirgiannis and G. Weikum, "*T-Rank: Time-aware Authority Ranking*", Third Workshop on Algorithms and Models for the Web-Graph (WAW 2004), October 2004, Rome, Italy, in conjunction with the 45th Annual IEEE Symposium on Foundations of Computer Science.
- C37. Ch. Lampos, M. Eirinaki, D. Jevtuchova, M. Vazirgiannis, "*Archiving the Greek Web*", in Proceedings of IAWW04, September 2004, Bath, UK
- C38. M. Eirinaki, Ch. Lampos, S. Paulakis, M. Vazirgiannis, "*Web Personalization Integrating Content Semantics and Navigational Patterns*", in Proceedings of ACM WIDM 2004, November 2004, Washington D.C., USA

2003

- C39. E. Valavanis, C. Ververidis, M. Vazirgiannis, G.C. Polyzos, K. Norvag. "MobiShare: Sharing Context-Dependent Data & Services from Mobile Sources", at the 2003 IEEE/WIC International Conference on Web Intelligence (WI 2003), Halifax, Canada, October 13-17, 2003.
- C40. C.Doulkeridis, E.Valavanis, M.Vazirgiannis, "Towards a Context-Aware Service Directory", in the proceedings of the VLDB/TES 2003 workshop.
- C41. M. Eirinaki, M. Vazirgiannis, I. Varlamis. "SEWeP: Using Site Semantics and a Taxonomy to Enhance the Web Personalization Process", in the 9th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, August 2003, Washington DC
- C42. S. Rizzi, E. Bertino, B. Catania, M. Golfarelli, M. Halkidi, M. Terrovitis, P. Vassiliadis, M. Vazirgiannis, E. Vrachnos. "Towards a logical model for patterns", in the proceedings of Entity Relationship Conference 2003

2002

- C43. C. Amanatidis, M. Halkidi, M. Vazirgiannis. "UMiner: A Data mining system that handles uncertainty and quality", Demo paper in the Proceedings of EDBT Conference, March 2002, Prague.
- C44. M. Halkidi, M. Vazirgiannis. "Managing uncertainty and quality in the classification process", in the Proceedings of SETN Conference, April 2002, Thessaloniki, Greece.
- C45. M. Halkidi, M. Vazirgiannis. "Clustering validity assessment using multi representatives", Poster paper in the Proceedings of SETN Conference, April 2002, Thessaloniki, Greece.

2001

- C46. I. Varlamis, M. Vazirgiannis, " Bridging XML-Schema and relational databases. A system for generating and manipulating relational databases using valid XML documents.", in the proceedings of ACM Symposium on Document Engineering, Nov. 2001, Atlanta, USA
- C47. M. Halkidi, M. Vazirgiannis, "Clustering Validity Assessment: Finding the optimal partitioning of a data set", in the Proceedings of the IEEE – International Conference on Data Mining (ICDM) 2001, California, USA, November 2001.
- C48. Maria Halkidi Michalis Vazirgiannis, "A data set oriented approach for clustering algorithm selection", in the proceedings of PKDD (Principles and Practice of Knowledge Discovery in Databases) 2001, Freiburg, Germany.
- C49. M. Halkidi, Y. Batistakis, M. Vazirgiannis, "Clustering algorithms and validity measures", tutorial paper in the proceedings of the Statistical and Scientific Data Base Management (SSDBM) 2001 Conference.
- C50. I. Varlamis, M. Vazirgiannis, "Web document searching using enhanced hyperlink semantics based on XML", in the proceedings of IDEAS '01 conference, Grenoble, France.
- C51. G. Akivas, S. Ioannou, E. Karakoulakis, K. Karpouzis, Y. Avrithis, A. Delopoulos, S. Kollias, M. Vazirgiannis, I. Varlamis, "An Intelligent System for Archiving and Retrieval of Audiovisual Material Based on the MPEG-7 Description Schemes", at the WSES/IEEE Multiconference 2001

- C52. R. Pitkänen, M. Vazirgiannis, G. C. Polyzos, «The role of streaming in Interactive Multimedia Documents dissemination», in the proceedings of IEEE- International Conference on Multimedia / Expo (ICME) 2001.
- C53. S. Lazaridis, M. Vazirgiannis, T. Sellis, "STEDEL: Spatiotemporal Definition Language, Modeling and rendering interactive 3D compositions", in the proceedings of ICME 2001, Tokyo.
- C54. M. Vazirgiannis, O. Wolfson, "A Spatiotemporal Query Language for Moving Point Contexts", in the proceedings of the Symposium on Spatial and Temporal Databases (SSTD) 2001 conference. Los Angeles

2000

- C55. M. Halkidi, M. Vazirgiannis, Y. Batistakis, "Quality scheme assessment in the clustering process", in the proceedings of PKDD (Principles and Practice of Knowledge Discovery in Databases) 2000 Conference, Lyon, France
- C56. D. Vodislav, M. Vazirgiannis, "Structured Interactive Animation for Multimedia Documents", in the proceedings of IEEE Visual Languages Symposium, Seattle, USA, September 2000.
- C57. I. Varlamis, M. Vazirgiannis I. Lazaridis, "Distributed Virtual Reality Authoring Interfaces For The WWW, in the proceedings of IEEE MULTIMEDIA 2000 conference.
- C58. Michalis Vazirgiannis, Maria Halkidi, "Uncertainty handling in the data mining process with fuzzy logic", in the proceedings of the IEEE-FUZZ conference, San Antonio, Texas, May, 2000.
- C59. M. Vazirgiannis, "Uncertainty handling in spatial relationships", in the proceedings of the ACM-SAC 2000.

1999

- C60. I. Mirbel, B. Pernici, M. Vazirgiannis, "Temporal Integrity Constraints in Interactive Multimedia Documents", in the proceedings of IEEE-International Conference on Multimedia Computing and Systems (ICMCS'99), Florence, Italy, June 1999.
- C61. C. Amanatidis, M. Halkidi, M. Tzouris, M. Vazirgiannis, "Uncertainty support for Classification & Rule extraction in Relational data sets: A fuzzy logic based approach", in the proceedings of the 5th International Conference of the Decision Sciences Institute, Athens, July 1999.
- C62. I. Kostalas, T.Sellis, M. Vazirgiannis, "Spatiotemporal specification & verification of multimedia scenarios", in the proceedings of the IFIP-DS-8 Conference on Multimedia Semantics, January 1999, New Zealand

1998

- C63. M. Erwig, R. H. Guting, M.Schneider, M. Vazirgiannis, "Spatio-temporal Data Types : An Approach to Modeling and Querying Moving Objects in Databases", in the proceedings of ACM GIS Symposium '98
- C64. D. Tsirikos, T. Markousis, G. Mouroulis, M. Hatzopoulos, M. Vazirgiannis, and G. Stavarakas, "A Client-Server Design for Interactive Multimedia Documents Based on Java.", in the proceedings of Interactive Distributed Multimedia Systems and Services Workshop IDMS ' 98, Oslo, September 1998 , Springer-Verlag.
- C65. M. Vazirgiannis, M. Trafalis, Y. Stamati, M. Hatzopoulos, "i-Mu.S.E. - Interactive Multimedia Scenario Editor", in the proceedings of the IEEE-MMDBMS '98 Workshop
- C66. M. Vazirgiannis, "A classification and relationship extraction scheme for relational databases based on fuzzy logic", in the proceedings of the Pacific -Asian Knowledge Discovery & Data Mining '98 conference, Melbourne, Australia.
- C67. M. Vazirgiannis, M. Trafalis, Y. Stamati, M. Hatzopoulos, "Interactive Multimedia Scenario: Modeling and Rendering", in the proceedings of the Multimedia track of ACM-SAC'98 conference.

1989-1997

- C68. M. Vazirgiannis, S. Boll, "Events In Interactive Multimedia Applications: Modeling And Implementation Design", in the proceedings of IEEE

- International Conference on Multimedia Computing and Systems (ICMCS'97), Ottawa, Canada, June 1997.
- C69. Stefanakis, M. Vazirgiannis, T. Sellis, "Spatial Decision Making Based on Fuzzy Set Methodologies", in the proceedings of International Society for Photogrammetry and Remote Sensing, XVIII ISPRS Congress Vienna, July 1996.
- C70. Vazirgiannis, A. Rekkas, M. Hatzopoulos, "Automatic hypermedia document generation based on electronic mark-up text: the ILDIC case", ESDA'96, Montpellier, France, July 96.
- C71. E. Stefanakis, M. Vazirgiannis, T. Sellis, "Incorporating Fuzzy Logic Methodologies into GIS Operations", in the proceedings of the International Conference in Urban, Environmental and Regional Planning, Greece, April 1996.
- C72. Y. Theodoridis, M. Vazirgiannis, T. Sellis, "Spatio-Temporal Indexing for Large Multimedia Applications", in the proceedings of the 3rd IEEE International Conference on Multimedia Computing and Systems (ICMCS'96), Hiroshima, Japan, June 1996.
- C73. M. Vazirgiannis, T. Sellis, "Event And Action Representation And Composition For Multimedia Application Scenario Modelling", ERCIM workshop on Interactive Distributed Multimedia Systems and Services, BERLIN, March 1996.
- C74. M. Vazirgiannis, Y. Theodoridis, T. Sellis, "Spatio Temporal Composition in Multimedia Applications", in the proceedings of the IEEE-ICSE '96 International Workshop on Multimedia Software Development - BERLIN, March 1996.
- C75. M. Vazirgiannis, A. Kalousis, M. Hatzopoulos, "KNOWEL: A HYPERMEDIA KNOWLEDGE EDITOR", in the proceedings of DEXA '95 Conference, London, Sep. 1995.
- C76. M. Vazirgiannis, M. Hatzopoulos, "Integrated Multimedia Object And Application Modeling based on events and scenarios " in the proceedings of 1st IEEE International Workshop for MMDBMSs, 8/1995, Blue Mountain Lake, NY (The Adirondacks).
- C77. M. Vazirgiannis, M. Hatzopoulos, "A Script Based Approach for Interactive Multimedia Applications", Proceedings of the MMM (International Conference on Multi-Media Modeling) Conference, Singapore, Nov. 1993.
- C78. M. Vazirgiannis, K.Petrou, A. Tsompanidis, M.Hatzopoulos, "Hypermedia and Knowledge Representation, an Object oriented design based on Fuzzy Algebra", Proceedings of the IEEE-SE&KE Conference, San Fransisco, June 1993.
- C79. M. Hatzopoulos, M. Vazirgiannis, et.al. , "An Object Oriented Data Model for a Hypermedia Database", in the Proceedings of Delta Conference, Den Haag, May 1990.
- C80. M. Thanisch, P. King, M. Vazirgiannis, Computer Science Dept, Herriot-Watt University, "A new approach to performance analysis of Relational data bases", 5th UK Computer and Telecommunications Performance Engineering Workshop, Edinburgh, Sep. 1989.

Non-refereed workshops

- N1 N. Oikonomakou, M. Vazirgiannis, "A Review of Web Document Clustering Approaches", invited paper in the NEMIS workshop, Springer verlag LNCS
- N2 I. Kostalas, M. Vazirgiannis, T. Sellis, "Spatiotemporal Specification and Verification for Multimedia Scenarios", CIW '97, First CHOROCHRONOS Intensive Workshop on Spatio-Temporal Database Systems, November, 13th-15th 1997, Austria
- N3 M. Erwig, R. Güting, M. Schneider, M. Vazirgiannis, "Spatio-Temporal Data Types: An Approach to Modeling and Querying Moving Objects in Databases", First CHOROCHRONOS Intensive Workshop on Spatio-Temporal Database Systems, November, 13th-15th 1997, Austria.

N4 M. Vazirgiannis, "Uncertainty handling in spatial relationships", Dagstuhl Seminar Integrating Spatial and Temporal Databases, 22 – 27 November 1998, Schloss Dagstuhl-Wadern, German

Technical reports

- T1. Maria Halkidi, Benjamin Nguyen, Iraklis Varlamis, Michalis Vazirgiannis, "THESUS: Organising Web Document Collections based on Semantics and Clustering", INRIA/Verso Report number 214 , 2002
- T2. R.H. Güting, M.H. Boehlen, M. Erwig, C.S. Jensen, N.A. Lorentzos, M. Schneider, and M. Vazirgiannis, A Foundation for Representing and Querying Moving Objects. FernUniversität Hagen, Informatik-Report 238, September 1998.
- T3. M. Erwig, R.H. Güting, M. Schneider, and M. Vazirgiannis, Spatio-Temporal Data Types: An Approach to Modeling and Querying Moving Objects in Databases. FernUniversität Hagen, Informatik-Report 224, December 1997
- T4. "Integrity Constraints for Interactive Multimedia Scenarios", I. Mirbel, B. Pernici, T. Sellis, M. Vazirgiannis, TMR-Chorochronos Technical report CH-98-6.
- T5. "Events In Interactive Multimedia Applications: Modeling And Implementation Design", M. Vazirgiannis, S. Boll, Arbeitspapiere der GMD 1028, Darmstadt, November 1996.

CITATIONS

The work of Dr. Vazirgiannis has been *cited* in more than 4000 journal and conference papers (excluding self references) while his *H-index* tool is 27, according to the "Publish or Perish tool". Part of the citations is available at the free citation index NECI (<http://citeseer.nj.nec.com/cs>) as well as on Google Scholar (<http://scholar.google.com>). His paper J16 is the *mostly cited paper*, regardless of discipline, in the Athens Univ. of Economics and Business (where he is affiliated) according to Web of Science citations index (as of October 2009).

PATENTS

- May 2003, "THESUS a system for retrieval and semantic organization of web content" (**2003-01-00216**) – held until 2006
- August 2003, "UMINER, a data mining system handling quality and uncertainty" (**2003-01-00338**) – held until 2006

LANGUAGES

Greek (mother tongue), English (fluent), Spanish (Good), French (basic), German (basic)