

Curriculum Vitae

Yannis Tzitzikas

April 2011

Birth date	27 October 1970
Birth place	Athens, Greece
Nationality	Greek
Marital Status	Married, one son
Home Address	Dellaporta 18, Heraklio, Crete, GR-71409 Greece Tel: +30 2810 321 097
Work Address	University of Crete Department of Computer Science Heraklion, Crete, GREECE GR71409 Tel: +30 2810 393 521 & Institute of Computer Science (ICS) Foundation for Research and Technology - Hellas (FORTH) Science and Technology Park of Crete, N. Plastira 100, Vassilika Vouton Heraklio, Crete, GREECE GR700 13 Tel: +30 2810 391 621 Fax: +30 2810 391 638 E-Mail: tzitzik@ics.forth.gr Web page: http://www.ics.forth.gr/~tzitzik
Current Position	Assistant Professor of Information Systems at the Computer Science Department University of Crete, and Associate Researcher of the Information Systems Laboratory (ISL) at FORTH-ICS.
Languages	English (read, written, spoken: fluently) Italian (read, written, spoken: medium level) French (read: fair, written, spoken: basic level) (Certificat) Greek (Mother Tongue)



Short Biography

Yannis Tzitzikas is currently Assistant Professor of Information Systems in the Computer Science Dep. at University of Crete (Greece) and Associate Researcher of the Information Systems Laboratory at FORTH-ICS (Greece). Before joining UofCrete and FORTH-ICS he was postdoctoral fellow at the University of Namur (Belgium) and ERCIM postdoctoral fellow at ISTI-CNR (Pisa, Italy) and at VTT Technical Research Centre of Finland. He conducted his undergraduate and graduate studies (MSc, PhD) in the Computer Science Department at the University of Crete. In parallel, he was a member of the Information Systems Lab of FORTH-ICS for about 8 years, where he conducted basic and applied research around semantic network-based information systems within several EU-founded research projects. His research interests fall in the intersection of the following areas: Information Systems, Information Indexing and Retrieval, Conceptual Modeling, Knowledge Representation and Reasoning, and Collaborative Distributed Applications. The results of his research have been published in more than 80 papers in refereed international conferences and journals, and he has received two best paper awards (at CIA'2003 and ISWC'07).

Education

September 2002 (26/9/02)

Doctor of Philosophy (Computer Science)

Department of Computer Science, University of Crete, Heraklion, Greece.

Dissertation Topic: “Collaborative Ontology-based Information Indexing and Retrieval”

Supervision: Prof. Panos Constantopoulos, Prof. Nicolas Spyrtatos, Prof. Dimitris Plexousakis;

Dissertation Committee Members: Prof. Vassilis Christophides, Prof. Yannis Ioannidis, Prof. Manolis Koubarakis, Prof. Timos Sellis.

June 1999 (30/6/99)

Pedagogical Studies for Teaching in Technical Education (SELETE, Heraklion, Crete)

(studies conducted in parallel to his military service at Greek Army).

November 1995 (23/11/95)

Master of Science (Computer Science)

Department of Computer Science, University of Crete, Heraklion, Greece.

Thesis Topic: “View Updates in Knowledge Bases of Telos”

Supervisor: Prof. Panos Constantopoulos

October 1992 (21/9/92)

Bachelor of Science (Computer Science)

Department of Computer Science, University of Crete, Heraklion, Greece

Degree: *very good*

June 1988

High School Graduation Certificate "APOLYTIRIO"

3rd Public Lyceum of Heraklion, Crete, Greece.

Areas of Expertise and Research Interests

- Information Indexing, Retrieval, Access and Exploration
 - Web Searching (Interactive Searching, Results Clustering, DBMS-based text indexes)
 - Theory, techniques and applications of multifaceted classification and exploratory searching
 - Unified interaction methods between users and information sources
- Information Systems
 - Semantic Data Management
 - Comparison operators, Knowledge Evolution and Versioning, Ontology Visualization, Application of Semantic Web for Digital Preservation, Provenance Modelling and Querying
 - Mediators and P2P systems, distributed query evaluation algorithms, automatic methods for mapping construction

Work/Research Experience

September 2006 - Now

Assistant Professor in the Computer Science Dep. at University of Crete (Greece).

February 2006 - Now

Associate Researcher of Information Systems Lab at FORTH-ICS (Greece).

February 2005 – September 2006

Adjunct Assistant Professor in the Computer Science Dep. at University of Crete (Greece).

April 2004 – February 2005

Post-Doctoral researcher at the Computer Science Department of University of Namur (F.U.N.D.P), Belgium.

Scientific responsible: Prof. Jean-Luc Hainaut.

Research topics: Novel techniques for Information Systems (Re-)Engineering: Random Walks for ER diagrams, automatic and semi-automatic techniques for conceptual schema drawing.

July 2003 – April 2004

ERCIM Post-Doctoral fellow at the Information Systems Lab of the VTT Technical Research Center of Finland.

Scientific responsible: Raimo Launonen.

Research: Scientific and technical manager of the two-term seven-student project “FASTAXON: A system for FAST (and Faceted) TAXONomy design” of the Helsinki University of Technology (HUT).

October 2002 – July 2003

ERCIM Post-Doctoral fellow at Istituto di Scienza e Tecnologie della Informazione [ISTI], Consiglio Nazionale delle Ricerche [CNR], Pisa, Italy.

Scientific responsible: Dr. Carlo Meghini

Research topics: Query evaluation algorithms for P2P systems, information integration, unified interaction models.

December 1999 – September 2002

Research Assistant, Institute of Computer Science [ICS], Foundation for Research and Technology, Hellas [FORTH], Heraklion, Greece.

Participation in several national and EU-funded research projects.

January 1998 – September 1999

Hellenic Army (obligatory military service in accordance to the Hellenic Conscription Law).

December 1995 – October 1997

Ph.D. Candidate, Computer Science Department, University of Crete, Heraklion, Greece.

October 1992 – November 1995

M.Sc. Student, Computer Science Department, University of Crete, Heraklion, Greece.

Thesis Topic: “View Updates in Knowledge Bases of Telos”.

Supervisor: Panos Constantopoulos

June 1992 – December 1994

Research Assistant, Institute of Computer Science [ICS], Foundation for Research and Technology, Hellas [FORTH], Heraklion, Greece.

Participation in the project ITHACA (ESPRIT project) and in the development of the semantic network-based repository system “Semantic Index System” (SIS).

Teaching Experience

February 2005 – Now

Computer Science Dep. at University of Crete (Greece).

Instructor of

CS-562 Advanced Database Topics (07-08, 08-09, 09-10)

with Nicolas Spyrtatos and Vassilis Christophides

(<http://www.csd.uoc.gr/~hy562>) .

CS-463 Information Retrieval Systems (05-06, 06-07, 07-08, 08-09, 09-10, 10-11)

(<http://www.csd.uoc.gr/~hy463>).

CS-351 Information Systems Analysis and Design (06-07, 07-08, 08-09, 09-10,10-11)

(<http://www.csd.uoc.gr/~hy361>) .

CS-252 Object-Oriented Programming (07-08)

(<http://www.csd.uoc.gr/~hy252>) .

CS-359 Web Programming (09-10,10-11)

(<http://www.csd.uoc.gr/~hy359>) .

October 1992 – September 2002

Teaching Assistant

Computer Science Department, University Crete, Heraklion, Greece.

Courses taught: CS465 – Information Systems, CS280 - Theory of Computation, CS265 – Conceptual Modelling, CS-140 Programming, CS-120 Digital Design, CS100 – Introduction to Computer Science. Duties involved lecturing, supervising, marking and student counselling.

1997 – 1999

Instructor and Scientific Responsible

Instructor and Scientific Responsible in five (5) Teachers' Mobility Programs (sponsored by the European Union) of the Direction of Higher Education of the prefecture of Heraklion and the 1st Office of the Higher Education Department of the prefecture of Heraklion. The curriculum of the programs regarded Office Automation, Networks and Telecommunication Services, and Internet (& WWW) Search, Authoring and Publication.

Information: Mrs Sofia Mousteraki, Mr Antonis Zaharioudakis.

Recent Research Projects

NoE **APARSEN** (Alliance Permanent Access to the Records of Science in Europe), **1/1/2011-31/12/2014**

Project number: 269977, Call: FP7-ICT-2009-6, Network of Excellence

COST ACTION IC2002 **MUMIA** (Multilingual and Multifaceted Interactive Information Access), **2010-2014**

National Representative, Vice Chair of the Working Group on Semantic and Faceted Search

Project **EO-USNG-Phase 2**, **1/5/2009 - 30/4/2010**

Scientific responsible for FORTH-ICS for the project **EO User Service Next Generation (EO USNG) – Phase 2**, Contract Num. with ESA: 21086/07/I-LG, Contr. Num. with ACS: CTR/ACS/FORTH/EO-USNG/09-289/1.0

Objective: advancing the access services of ESA (European Space Agency). ESA Funding (for FORTH-ICS) : € 35 000.

Project **EO-USNG**, 1/2/2008-1/10/2008

Scientific responsible for FORTH-ICS for the project **EO User Service Next Generation (EO USNG)**, Contr. Num. with ESA: 21086/07/I-LG, Contr. Num. with ACS: CTR/ACS/FORTH/EO-USNG/07-739.

Objective: advancing the access services of ESA (European Space Agency). ESA Funding (for FORTH-ICS) : € 25 000.

Project **CASPAR**, 1/4/2006-30/9/2009

CASPAR (Cultural, Artistic and Scientific knowledge for Preservation, Access and Retrieval), FP6-2005-IST-033572, 1/4/2006 - 30/9/2009 (42 months), EU Funding: € 8 800 000.

I had an active participation and my work on dependency management was one of the key results of this project. The related deliverables were characterized as “*of remarkably high quality*” at the annual project reviews.

Project **KP-LAB**, 1/2/2006-today

KP-LAB, FP6-2004-IST-4, 1/2/2006-31/01/2011, EU funding: 11M Euros.

Participation to the development of the SWKM platform with emphasis on issues related to the comparison (delta) of semantic models and on applying Semantic Technologies for e-learning

Publications

Edited Monographs (1)

A1 - G. M. Sacco and Yannis Tzitzikas, “**Dynamic Taxonomies and Faceted Search**”, Springer, 2009). Co-Editor, author of two chapters, co-author of three chapters.

Edited Collections (1)

B1 - W. Lindner, M. Mesiti, C Turker, Y. Tzitzikas and A. Vakali, “**Current Trends in Database Technology - EDBT 2004 Workshops**”, Springer LNCS Vol 3268, 2004, XVIII, ISBN:3-540-23305-9.

Book Chapters (9)

Γ1 - Y. Tzitzikas, Y. Marketakis, V. Christophides, **Preservation of Intelligibility of Digital Objects**, Springer, in D.G. Giarretta ed. *Advanced Digital Preservation* (to appear in 2011)

Γ2 - Yannis Tzitzikas, “**Faceted Taxonomy-based Sources**”, in G. M. Sacco and Yannis Tzitzikas editors, *Dynamic Taxonomies and Faceted Search*, Springer, 2009.

Γ3 - Sebastien Ferre, Giovanni Maria Sacco, Yannis Tzitzikas, “**Comparison with other Techniques**”, in G. M. Sacco and Yannis Tzitzikas editors, *Dynamic Taxonomies and Faceted Search*, Springer 2009.

Γ4 - Yannis Tzitzikas, “**Engineering Taxonomy-based Sources**”, in G. M. Sacco and Yannis Tzitzikas editors, *Dynamic Taxonomies and Faceted Search*, Springer 2009.

- Γ5 - Sebastien Ferre, Giovanni Maria Sacco, Yannis Tzitzikas, “**System Implementation**”, in G. M. Sacco and Yannis Tzitzikas editors, *Dynamic Taxonomies and Faceted Search*, Springer 2009.
- Γ6 - Giovanni Maria Sacco, Yannis Tzitzikas, “**Conclusion**”, in G. M. Sacco and Yannis Tzitzikas editors, *Dynamic Taxonomies and Faceted Search*, Springer 2009.
- Γ7 - D. Kotzinos, G. Flouris, Y. Tzitzikas, D. Andreou, V. Christophides, “**Supporting Evolution of Knowledge Artifacts in Web Based Learning Environments**”, in *Solutions and Innovations in Web-Based Technologies for Augmented Learning: Improved Platforms, Tools and Applications*, (Series Title: Advances in Web-Based Learning), Publisher: Information Science Reference (ISBN: 1605662380), 2008
- Γ8 - N. Spyrtos and Y. Tzitzikas, “**Searching**”, *Wiley Encyclopedia of Electrical and Electronics Engineering*, John Wiley & Sons, 2003.
- Γ9 - Y. Tzitzikas, N. Spyrtos and P. Constantopoulos, “**Deriving Valid Expressions from Ontology Definitions**”, Information Modelling and Knowledge Bases XIII, Kangassalo H., Welzer T., Jaakkola H., Rozman I., Kawaguchi E. (editors), IOS Press, Amsterdam, 2002.

Journals (refereed) (17)

- Δ1 - P. Papadakos, N. Armenatzoglou, S. Kopidaki and Y. Tzitzikas, **On Exploiting Static and Dynamically-mined Metadata for Exploratory Web Searching**, KAIS (Knowledge and Information Systems) Journal (accepted in 2011 for publication)
- Δ2 -D. Zeginis, Y. Tzitzikas, V. Christophides, **On Computing Deltas of RDF/S Knowledge Bases**, ACM Transactions on the Web (TWEB) (accepted in 2010 for publication, to appear in 2011).
- Δ3 -Y. Marketakis and Y. Tzitzikas, **Dependency Management for Digital Preservation using Semantic Web technologies**, International Journal on Digital Libraries, 10(4), 2009-2010
- Δ4 -M. Theodoridou, Y. Tzitzikas, M. Doerr, Y. Marketakis, V. Melessanakos, “**Modeling and Querying Provenance by Extending CIDOC CRM**”, J. Distributed and Parallel Databases (Special Issue Call for Papers: Provenance in Scientific Databases), to appear in 2010.
- Δ5 -Y. Tzitzikas, “**On Providing Intelligibility-Aware Preservation Services for Digital Objects**”, Data Science Journal, Vol. 8, 2009
- Δ6 -Y. Theoharis, Y. Tzitzikas, D. Kotzinos and V. Christophides, “**On Graph Features of Semantic Web Schemas**”, IEEE Transactions on Knowledge and Data Engineering, 20(5), 2008
- Δ7 -C. Meghini, N. Spyrtos and Y. Tzitzikas, “**Abduction for Accessing Information Sources**”, Journal Fundamenta Informaticae, 83(4), 2008
- Δ8 -Y. Tzitzikas, “**Evolution of Faceted Taxonomies and CTCA Expressions**”, KAIS (Knowledge and Information Systems) Journal, 13(3), 2007
- Δ9 -Y. Tzitzikas, A. Analyti, N. Spyrtos and P. Constantopoulos, “**An Algebra for Specifying Valid Compound Terms in Faceted Taxonomies**”, Journal on Data and Knowledge Engineering (DKE), 62(1), 2007.
- Δ10 - Y. Tzitzikas, D. Kotzinos and Y. Theoharis, “**On Ranking RDF Schema Elements (and its Application in Visualization)**”, Journal of Universal Computer Science (JUCS), Special Issue: Ontologies and Their Applications, Nov 2007.

- Δ11 - Y. Tzitzikas, V. Christophides, G. Flouris, D. Kotzinos, H. Markkanen, D. Plexousakis and N. Spyratos, “**Emergent Knowledge Artifacts for Supporting Trialogical E-Learning**”, *International Journal of Web-based Learning and Teaching Technologies (IJWLTT)*, 2(3), 2007
- Δ12 - Y. Tzitzikas, “**An Algebraic Method for Compressing Symbolic Data Tables**”, *Journal on Intelligent Data Analysis*, 10(4), 2006.
- Δ13 - Y. Tzitzikas, C. Meghini and N. Spyratos, “**A Unified Interaction Scheme for Information Sources**”, *Journal of Intelligent Information Systems (JIIS)*, 26(1), January 2006
- Δ14 - Y. Tzitzikas and A. Analyti, “**Mining the Meaningful Term Conjunctions from Materialized Faceted Taxonomies: Algorithms and Complexity**”, *KAIS Journal*, 9(4), 2006.
- Δ15 - Y. Tzitzikas, N. Spyratos and P. Constantopoulos, “**Mediators Over Taxonomy-based Information Sources**”, *VLDB Journal*, 14(1), March 2005.
- Δ16 - Y. Tzitzikas, A. Analyti and N. Spyratos, “**Compound Term Composition Algebra: The Semantics**”, *LNCS Journal on Data Semantics*, Vol. 2, January 2005.
- Δ17 - Y. Tzitzikas, N. Spyratos and P. Constantopoulos, “**Query Evaluation for Mediators Over Web Catalogs**”, *International Journal on Information Theories and Applications*, 9(2), 2002.

International Conferences (refereed) (46)

- E1 -N. Manolis and Y. Tzitzikas, **Interactive Exploration of Fuzzy RDF Knowledge Bases**, 8th Extended Semantic Web Conference, ESWC 2011, Heraklion, Greece, June 2011
- E2 -H. Kondylakis, D. Plexousakis, Y. Tzitzikas, **Ontology Evolution in Data Integration**, 4th International Workshop on Ontology Dynamics (IWOD-10) Shanghai, China, 2010.
- E3 -D. Kastrinakis and Y. Tzitzikas, **Advancing Search Query Autocompletion Services with More and Better Suggestions**, 10th International Conference on Web Engineering (ICWE'10), Vienna, July 2010
- E4 - S. Zampetakis, Y. Tzitzikas, A. Leonidis, D. Kotzinos, **StarLion: Auto-Configurable Layouts for Exploring Ontologies**, 7th Extended Semantic Web Conference, Demo Track, ESWC 2010, Heraklion, Greece, June, 2010
- E5 -H. Kondylakis, D. Plexousakis, Y. Tzitzikas, **Ontology Evolution in Data Integration**, 7th Extended Semantic Web Conference, Poster Paper, ESWC 2010, Heraklion, Greece, June, 2010
- E6 -Y. Marketakis, M. Tzanakis and Y. Tzitzikas, “**PreScan: Towards Automating the Preservation of Digital Objects**”, *Proceedings of the International ACM Conference on Management of Emergent Digital EcoSystems, MEDES'2009*, Lyon, France, October 2009.
- E7 -S. Kopidaki, P. Papadacos and Y. Tzitzikas, “**STC+ and HSTC: Two Novel Online Results Clustering Methods for Web Searching**”, *Proceedings of the 10th International Conference on Web Systems Engineering (WISE'2009)*, Oct. 2009, Poznan, Poland.
- E8 - A. Analyti, Y. Tzitzikas and Nicolas Spyratos, “**Specifying Valid Compound Terms in Interrelated Faceted Taxonomies**”, *Proceedings of the 28th International Conference on Conceptual Modeling (ER'2009)*, November 2009, Gramado, Brazil.
- E9 -P. Papadacos, S. Kopidaki, N. Armenatzoglou and Y. Tzitzikas, “**Exploratory Web Searching with Dynamic Taxonomies and Results Clustering**”, *Proceedings of the 13th European Conference on Digital Libraries (ECDL'2009)*, Oct. 2009, Corfu Greece.

- E10 - Y. Tzitzikas, Y. Theoharis and D. Andreou, "**On Storage Policies for Semantic Web Repositories that Support Versioning**", Proceedings of the *5th European Semantic Web Conference (ESWC'08)*, Tenerife, Spain, June 2008.
- E11 - Y. Tzitzikas, N. Armenatzoglou and P. Papadakos, "**FleXplorer: A Framework for Providing Faceted and Dynamic Taxonomy-based Information Exploration**", Proceeding of *FIND'2008 (at DEXA '08)*, Turin, Italy, September 2008
- E12 - I. Roussidis, G. Tzagkarakis, D. Plexousakis and Y. Tzitzikas, "**On a Probabilistic Combination of Prediction Sources**", Proceedings of the *17th International Symposium on Methodologies for Intelligent Systems (ISMIS'08)*, Toronto, Canada, May 20-23, 2008.
- E13 - D. Zeginis, Y. Tzitzikas and V. Christophides, "**On the Foundations of Computing Deltas between RDF models**", Proceedings of the *6th International Semantic Web Conference (ISWC'2007)*, Korea, Nov. 2007. (BEST PAPER AWARD)
- E14 - Y. Tzitzikas and G. Flouris, "**Mind the (Intelligibility) Gap**", Proceedings of the *11th European Conference on Research and Advanced Technology for Digital Libraries, ECDL'2007*, Budapest, Hungary, September 2007.
- E15 - Y. Tzitzikas, "**Dependency Management for the Preservation of Digital Information**", Proceedings of the *18th International Conference on Database and Expert Systems Applications, DEXA'2007*, Regensburg, Germany, September 2007.
- E16 - Y. Tzitzikas and A. Analyti, "**Faceted Taxonomy-based Information Management**", Proceedings of the *2nd International Workshop on Dynamic Taxonomies and Faceted Search, FIND'2007* (satellite workshop of DEXA'2007), Regensburg, Germany, September 2007.
- E17 - Y. Tzitzikas, "**On Preserving the Intelligibility of Digital Objects through Dependency Management**", Proceedings of the *International Conference PV'2007 (Ensuring the Long-Term Preservation and Value Adding to Scientific and Technical Data)*, Oberpfaffenhofen/Munich, Germany, October 2007.
- E18 - Y. Tzitzikas and Y. Theoharis, "**Naming Functions for the Vector Space Model**", Proceedings of the *29th European Conference on Information Retrieval, ECIR'2007*, Rome, Italy, April 2007.
- E19 - Y. Tzitzikas, D. Kotzinos, "**(Semantic Web) Evolution through Change Logs: Problems and Solutions**", Proceedings of *Artificial Intelligence and Applications, AIA'2007*, Innsbruck, Austria, February 2007.
- E20 - Y. Tzitzikas, V. Christophides, G. Flouris, D. Kotzinos, H. Markkanen and D Plexousakis, "**Triological E-Learning and Emergent Knowledge Artifacts**", Proceedings of the *First European Conference on Technology Enhanced Learning, EC-TEL'2006*, Heraklion, October 2006.
- E21 - Y. Tzitzikas and Jean-Luc Hainaut, "**On the Visualization of Large-sized Ontologies**", Proceedings of *8th International. Conference. on Advanced Visual Interfaces, AVI'2006*, Venice, Italy, May 2006.
- E22 - Y. Tzitzikas and Jean-Luc Hainaut, "**How to Tame a Very Large ER Diagram (using Link Analysis and Force-Directed Placement Algorithms)**", Proceedings of *24th International. Conference. on Conceptual Modeling, ER'2005*, Klagenfurt, Austria, October 2005.
- E23 - Y. Tzitzikas, R. Launonen, M. Hakkarainen, P. Kohonen, T. Leppanen, E. Simpanen, H. Tornroos, P. Uusitalo and P. Vanska, "**FASTAXON: A system for FAST (and Faceted) TAXONomy design**", Proceedings of *23rd International. Conference. on Conceptual Modeling, ER'2004*, Shanghai, China, November 2004.

- E24 - C. Meghini and Y. Tzitzikas, “**Querying Articulated Sources** ”, Proceedings of the *3rd International Conference on Ontologies, Databases and Applications of Semantics for Large Scale Information Systems, ODBASE’2004*, Larnaca, Cyprus, October 2004.
- E25 - Y. Tzitzikas and A. Analyti, “**Mining the Meaningful Compound Terms from Materialized Faceted Taxonomies** ”, Proceedings of the *3rd International Conference on Ontologies, Databases and Applications of Semantics for Large Scale Information Systems, ODBASE’2004*, Larnaca, Cyprus, October 2004.
- E26 - Y. Tzitzikas, “**An Algebraic Method for Compressing Very Large Symbolic Data Tables**”, Proceedings of the *Workshop on Symbolic and Spatial Data Analysis of ECML/PKDD 2004*, Pisa, Italy, September 2004.
- E27 - Y. Tzitzikas, C. Meghini and N. Spyrtos, “**A Unifying Framework for Flexible Information Access in Taxonomy-based Sources**”, Proceedings of the *6th International Conference on Flexible Query Answering Systems, FQAS’2004*, Lyon, France, June 2004.
- E28 - Y. Tzitzikas, C. Meghini and N. Spyrtos, “**Towards a Generalized Interaction Scheme for Information Access**”, Proceedings of the *3rd International Symposium on Foundations of Information and Knowledge Systems, FoIKS’2004*, Vienna, Austria, February 2004.
- E29 - Y. Tzitzikas and C. Meghini, “**Query Evaluation in Peer-to-Peer Networks of Taxonomy-based Sources**”, Proceedings of the *10th International Conference on Cooperative Information Systems, CoopIS’2003*, Catania, Sicily, Italy, November 2003.
- E30 - Y. Tzitzikas, A. Analyti and N. Spyrtos, “**The Semantics of the Compound Term Composition Algebra**”, Proceedings of the *second International Conference on Ontologies, Databases and Applications of Semantics, ODBASE’2003*, Catania, Sicily, Italy, November 2003.
- E31 - Y. Tzitzikas, C. Meghini, and N. Spyrtos, “**Taxonomy-based Conceptual Modeling for Peer-to-Peer Networks**”, Proceedings of the *22th International Conference on Conceptual Modeling, ER’2003*, Chicago, Illinois, October 2003.
- E32 - Y. Tzitzikas and C. Meghini. **Query Evaluation over Networks of Logic-based Mediators** (Position Paper), Proceedings of DL’03, *International Workshop on Description Logics*, Rome, Italy, September 2003.
- E33 - Y. Tzitzikas and C. Meghini, “**Ostensive Automatic Schema Mapping for Taxonomy-based Peer-to-Peer Systems**”, Proceedings of the *7th International Conference on Cooperative Information Agents, CIA’2003*, Helsinki, Finland, August 2003 (BEST PAPER AWARD).
- E34 - C. Meghini, Y. Tzitzikas and N. Spyrtos, “**An Abduction-based Method for Index Relaxation in Taxonomy-based Sources**”, Proceedings of the *28th International Symposium on Mathematical Foundations of Computer Science, MFCS’03*, Bratislava, Slovak Republic, August 2003.
- E35 - Y. Tzitzikas, A. Analyti, N. Spyrtos and P. Constantopoulos, “**An Algebra for Specifying Compound Terms for Faceted Taxonomies**”, Proceedings of the *13th European-Japanese Conference on Information Modelling and Knowledge Bases*, Kitakyushu, Japan, June 2003.
- E36 - Y. Tzitzikas, N. Spyrtos, P. Constantopoulos and A. Analyti, “**Extended Faceted Taxonomies for Web Catalogs**”, Proceedings of the *3rd International Conference on Web Information System Engineering, WISE-02*, Singapore, December 2002.

- E37 - Y. Tzitzikas, N. Spyrtatos and P. Constantopoulos, “**Query Evaluation for Mediators Over Web Catalogs**”, Procs of the 27th *Int. Conference on Information and Communication Technologies and Programming, ICT&P-2002*, Primorsko, Boulgaria, June 2002.
- E38 - Y. Tzitzikas, N. Spyrtatos, P. Constantopoulos and A. Analyti, “**Extended Faceted Ontologies**”, (short paper), Proceedings of the 14th *International Conference on Advanced Information Systems Engineering, CAiSE-2002*, Toronto, Canada, May 2002.
- E39 - N. Spyrtatos, Y. Tzitzikas and V. Christophides, “**On Personalizing the Catalogs of Web Portals**”, Proceedings of the 15th *International Conference of Florida Artificial Intelligence Research, FLAIRS-2002*, Pensacola, Florida, May 2002.
- E40 - Y. Tzitzikas, N. Spyrtatos and P. Constantopoulos, “**Mediators Over Ontology-based Information Sources**”, Proceedings of the 2th *International Conference on Web Information System Engineering, WISE-01*, Kyoto, Japan, December 2001.
- E41 - Y. Tzitzikas, “**Democratic Data Fusion for Information Retrieval Mediators**”, Proceedings of the *ACS/IEEE International Conference on Computer Systems and Applications, AICCSA’01*, Beirut, Lebanon, June 26-29, 2001.
- E42 - Y. Tzitzikas, N. Spyrtatos and P. Constantopoulos, “**Deriving Valid Expressions from Ontology Definitions**”, Proceedings of the 11th *European-Japanese Conference on Information Modelling and Knowledge Bases*, Maribor, Slovenia, 29 May-1 June, 2001.
- E43 - Y. Tzitzikas and P. Constantopoulos, “**A Decision-theoretic Model for Information Retrieval Supporting Time Constraints**”, Proceedings of the *BCS-IRSG European Colloquium on IR Research*, Darmstadt, Germany, April 4-6, 2001.
- E44 - Y. Tzitzikas and P. Constantopoulos, “**Context-Driven Information Base Update**”, Proceedings of the 8th *International Conference on Advanced Information Systems Engineering, CAiSE’96*, Heraklion, Crete, Greece, May 20-24, 1996.
- E45 - Y. Tzitzikas, “**Exploiting Semantic Networks to Generate Hypermedia**”, 3rd *Doctoral Consortium on Advanced Information Systems Engineering*, Heraklion, Crete, Greece, May 20-21 1996.
- E46 - P. Constantopoulos, Y. Tzitzikas and M. Theodorakis, “**Developing Hypermedia Over an Information Repository**”, 2nd *International Workshop on Open Hypermedia Systems at Hypertext’96*, Washington DC, USA, March 16-20, 1996.

National Conferences (refereed) (12)

- Z1 - H. Kondylakis, D. Plexousakis and Y. Tzitzikas, **Ontology Evolution in Data Integration**, 9th *Hellenic Data Management Symposium (HDMS’10)*, July 2010, Cyprus.
- Z2 -Y. Tzitzikas, Y. Marketakis and G. Antoniou, **Task-based Dependency Management for the Preservation of Digital Objects using Rules**, Proceedings of the 6th *Hellenic Conference on Artificial Intelligence, SETN-2010*, Athens.
- Z3 -P. Papadakos, S. Kopidaki, N. Armenatzoglou and Y. Tzitzikas, “**Exploratory Web Searching with Dynamic Taxonomies and Results Clustering**”, Short Paper at the 8th *Hellenic Data Management Symposium (HDMS’09)*, August 2009, Athens Greece.

- Z4 -P. Papadakos, Y. Theoharis, Y. Marketakis, N. Armenatzoglou and Y. Tzitzikas, "**Mitos: Design and Evaluation of a DBMS-based Web Search Engine**", Proceedings of the *12th Pan-Hellenic Conference of Informatics (PCI'2008)*, Samos, Greece, August 2008.
- Z5 -D. Zeginis, Y. Tzitzikas and V. Christophides, "**On Computing Deltas of RDF/S Knowledge Bases**", Proceedings of the *7th Hellenic Data Management Symposium (HDMS'2008)*, Heraklion, Greece, July 2008.
- Z6 -Y. Tzitzikas, Y. Theoharis and D. Andreou, "**On Archiving and Versioning Semantic Web Data**", Proceedings of the *7th Hellenic Data Management Symposium (HDMS'2008)*, Heraklion, Greece, July 2008.
- Z7 -Y. Tzitzikas "**Revising Faceted Taxonomies and CTCA Expressions**", Proceedings of the *4th Hellenic Conference on Artificial Intelligence, SETN-2006*, Heraklion, Crete, May 2006.
- Z8 -C. Meghini, Y. Tzitzikas and Nicolas Spyratos "**Abduction for Extending Incomplete Information Sources**", Proceedings of the *4th Hellenic Conference on Artificial Intelligence, SETN-2006*, Heraklion, Crete, May 2006.
- Z9 -Y Theoharis, V. Christophides and Y. Tzitzikas, "**On Graph Features of Semantic Web Schemas**", *Proceedings of the 5th Hellenic Data Management Symposium (HDMS'2006)*, Thessaloniki, Greece, September 2006.
- Z10 - Y. Tzitzikas and Jean-Luc Hainaut, "**Less is More: How to Tame a Very Large ER Diagram**", Proceedings of *4th Hellenic Data Management Symposium (HDMS'05)*, Athens, Greece, August 2005.
- Z11 - Y. Tzitzikas, A. Analyti, N. Spyratos and P. Constantopoulos, "**An Algebraic Approach for Specifying Compound Terms in Faceted Taxonomies**", Proceedings of the *2nd Hellenic Data Management Symposium, HDMS'03*, Athens, Greece, September, 2003.
- Z12 - Y. Tzitzikas, N. Spyratos and P. Constantopoulos, "**Query Translation for Mediators Over Ontology-based Information Sources** ", Proceedings of the *2th Hellenic Conference on Artificial Intelligence, SETN-2002*, Thessaloniki, Greece, April 2002.

Newsletters (4)

- H1 - Y. Tzitzikas and Y. Marketakis, **Automating the Ingestion and the Transformation of Embedded Metadata (in CASPAR)**, ERCIM News, January 2010
- H2 - Yannis Tzitzikas and Vassilis Christophides, **Knowledge Management for Digital Preservation (the CASPAR project experience)**, ERCIM News, January 2010
- H3 - Y. Tzitzikas and C. Meghini, "**Content-based Retrieval Services in Peer-to-Peer Systems using Taxonomies**", ERCIM NEWS, Volume 53, April 2003.
- H4 - Y. Tzitzikas, N. Spyratos, P. Constantopoulos and A. Analyti, "**Extended Faceted Taxonomies for Web Catalogs**", ERCIM NEWS, Volume 51, October 2002.

Technical Reports and Theses (9)

- Θ1 - P. Papadakos, Y. Theoharis, Y. Marketakis, N. Armenatzoglou and Y. Tzitzikas, "**Object-Relational Database Representations for Text Indexing**", CoRR, Information Retrieval, arXiv:0906.3112v1 [cs.IR], June 2009.
- Θ2 - P. Papadakos, G. Vasiliadis, Y. Theoharis, N. Armenatzoglou, S. Kopidaki, Y. Marketakis, M. Daskalakis, K. Karamaroudis, G. Linardakis, G. Makrydakias, V. Papathanasiou, L. Sardis, P. Tsialiamanis, G. Troullinou, K. Vandikas, D. Velegrakis and Y. Tzitzikas, "**The Anatomy of Mitos Web Search Engine**", CoRR, Information Retrieval, abs/0803.2220, 2008.

- Θ3 - C. Meghini, Y. Tzitzikas and A. Analyti, "**Query Evaluation in P2P Systems of Taxonomy-based Sources: Algorithms, Complexity, and Optimizations**", CoRR arXiv:0709.3034v1 [cs.DB], 2007.
- Θ4 - Y. Tzitzikas, A. Analyti, N. Spyrtos and P. Constantopoulos, "**An Algebra for Specifying Compound Terms for Faceted Taxonomies**", *Technical Report FORTH-ICS-TR-314*, October 2002.
- Θ5 - Y. Tzitzikas and N. Spyrtos, "**Result Fusion by Mediators Using Voting and Utility Functions**", CNRS-Universite de Paris Sud, Laboratoire de Recherche en Informatique, Rapport de Recherche No 1332, Sep 2002.
- Θ6 - Y. Tzitzikas, "**Collaborative Ontology-based Information Indexing and Retrieval**", PhD Thesis, Computer Science Department, University of Crete, Greece, September 2002.
- Θ7 - Y. Tzitzikas, N. Spyrtos and P. Constantopoulos, "**Extended Faceted Ontologies for Web Portals**", *Technical Report FORTH-ICS-TR-293*, October 2001.
- Θ8 - Y. Tzitzikas, "**View Updates in Knowledge Bases**", Master's Thesis, Technical Report FORTH-ICS-TR-142, October 1995.
- Θ9 - D. Daskalakis and Y. Tzitzikas, "**Customizing Data Entry Forms**", Foundation of Research and Technology - Institute of Computer Science - Information Systems and Software Technology Group. Working Paper No#9.

Citations

"Publish or Perish" (on May 2010) returns 498 citations and h-index equal to 12.

Tutorials and Seminars

- Invitation to be tutor at: *Transistor'2009*, Workshop on Preservation and Post-Production, May, Prague (<http://transistor.ciant.cz/2009/>), not accepted due to scheduling conflicts
- "**A Case Study of Long-Running Business Processes: Digital Information Preservation**", First SSME Workshop and Supper School "The Business Process in the Science of Service", Heraklion, Crete, Greece, June 2, 2007.
- "**Knowledge Management in Digital Preservation: The CASPAR Experience**", Event: DPE (Digital Preservation Europe), Nov. 23, 2006, Glasgow, UK.
- "**New Advances in Taxonomies and Taxonomy-based Information Sources**", Institut d'Informatique, University of Namur (F.U.N.D.P.), April 26, 2004.
- "**The Compound Term Composition Algebra**", VTT Technical Research Centre of Finland, September 5, 2003.
- "**The Compound Term Composition Algebra and the Ostensive Automatic Schema Mapping**", University of Helsinki, Finland, August 21, 2003 (invited by Prof. Heikki Mannila).

- “**Mediators over Ontology-based Information Sources and Extended Faceted Ontologies**”, Istituto di Scienza e Tecnologie della Informazione [ISTI] - Consiglio Nazionale delle Ricerche [CNR], Pisa, Italy, October 2002.
- “**Mediators over Ontology-based Sources and Democratic Result Fusion**”, Meme Media Lab, Department of Electrical Engineering - University of Hokkaido, Japan, August 2001.

Short Research Visits

July 2001 – August 2001

Visiting researcher at the Meme Media Lab of the Department of Electrical Engineering - University of Hokkaido (Japan).

Awards and Distinctions

Best Paper Award at the *6th International Semantic Web Conference (ISWC'2007)*, Korea, Nov. 2007, for the paper “**On the Foundations of Computing Deltas between RDF models**” (work done in collaboration with the MSc student D. Zeginis and Prof. V. Christophides).

Best Paper Award in the CIA'2003 conference for the work entitled “Ostensive Automatic Schema Mapping for Taxonomy-based Peer-to-Peer Systems” (joint work with Carlo Meghini).

October 2002 – April 2004

ERCIM fellowship for postdoctoral studies at ISTI-CNR (Italy) and VTT (Finland).

Sep 2001 – Sep 2002.

Maria Michael Manasaki legacy's fellowship (awarded to the best graduate student of Computer Science department of the University of Crete, once a year).

June 1992 – October 1997 and December 1999 – September 2002

Fellowship from FORTH-ICS.

Student Supervision

- **Supervisor of the following completed MSc Theses:**
 1. N. Manolis, Interactive Exploration of Fuzzy RDF Knowledge Bases, 2011
 2. M. Psaraki, Compact Archiving of Multiple (and possibly Versioned) RDF/S Triple Sets, 2011
 3. M. Kabouraki, Managing Resource Description Specificity under Ontology Schema Evolution, 2011
 4. Y. Marketakis, Conceptual Modeling and Tools for Digital Preservation, 2010
 5. N. Armenatzoglou, Efficient Faceted Exploration Services for Big Volumes of Information, 2010
 6. M. Papadakis, Set Cover-based Results Caching for Best Match Retrieval Models, 2010
 7. Martin Krčmář, Visualization of RDF Deltas, co-supervision with Prof. Pavel Smrz (Brno University of Technology, Czech Republic), 2009
 8. S. Kopidaki, Results Clustering in Web Searching, 2009
 9. D. Zeginis, On Computing Deltas of RDF/S Knowledge Bases, co-supervision with Prof. V. Christophides, 2008

- **Member of the Supervision Committee of the following PhD students**
 1. C. Kondylakis, University of Crete (completed)
 2. P. Papadakos, University of Crete (ongoing)
 3. D. Pritsos, Aegean University (ongoing)

- **External Committee Member for the following PhD Theses**
 1. S.Senthamarai Kannan, Dissertation title: "Attribute selection models for Data clustering and Classification", Thiagarajar College of Engineering, Madurai, India, 2009

- **Supervisor of the following Diploma Theses**
 1. M. Hickson, Design and Development of a system for Browsing Movies using Semantic Web Technologies with Emphasis on Clustering Services, 2011
 2. Y. Kargakis, Design and Development of a system for Browsing Movies using Semantic Web Technologies with Emphasis on Similarity Functions, 2011
 3. N. Klidis, Design and Development of the System "FilmCovery", 2011
 4. S. Tsironis, Extensions of the System "Diathesis", 2010
 5. D. Kastrinakis, Scalable Autocompletion Services for Web Search Engines, 2010
 6. D. Pontikis, Design and Implementation of a Personal Search Engine, 2010
 7. Y. Kitsos, Dynamic Entity Mining in Web Searching, 2010
 8. D. Komitopoulou, A System for Transforming Ontological Metadata, 2010
 9. K. Sidiropoulos, Design and Implementation of a Web Crawler, 2009
 10. S. Zabetakis, Visualization of RDF Schemas, 2009
 11. K. Tsintaris, Design and Implementation of a Web Crawler for Mitos, 2009
 12. T. Tzanakis, Automatic file scanner for Digital Preservation, 2009
 13. Y. Marketakis, Dependency Management for Digital Preservation, 2008
 14. M. Tavals, K-means based Results Clustering, 2007
 15. A. Pitsiladis, A System for Resource Management for the Department of Computer Science, 2007
 16. A. Leonidis, A System for Visualizing Ontologies, 2007

- Technical manager and coordinator of the two-term seven-student project FASTAXON of the Helsinki University of Technology (HUT). Group members: Mika Hakkarainen, Pekka Korhonen, Tero Leppanen, Esko Simpanen, Hannu Tornroos, Pekka Uusitalo and Pentti Vanska September. Duration: September 2003 - April 2004.

- Co-supervisor (with Dr. Anastasia Analyti) of the diplomatic thesis of Costas Terzakis entitled "VoteRank Metasearcher", Department of Computer Science, University of Crete, March 2003 - September 2003 .

Organizational Activities

- **Journal Reviewer/Editor**
 - Senior Associate Editor of the Data Science Journal (<http://dsj.codataweb.org/>), International Council for Science (ICSU), 2008-today

- External reviewer: Journal on Distributed and Parallel Databases (DAPD), Special Issue: Provenance in Scientific Databases, 2009
- **Program Committee Member of International/National Conferences**
 - *International Conference on Artificial Intelligence and Applications, AIA'2010*, Innsbruck, Austria, February 2010.
 - *International Conference on Web Information Systems and Mining, WISM'2009*, Shanghai, China, November 2009.
 - *5th European Semantic Web Conference, ESWC'08*, Tenerife, Spain, June 2008.
 - *International Conference on Artificial Intelligence and Applications, AIA'2008*, Innsbruck, Austria, February 11-13, 2008.
 - *3rd International Workshop on Dynamic Taxonomies and Faceted Search, FIND'08 (at DEXA'2008)*, Torino, Italy, September 2008.
 - *7th Hellenic Data Management Symposium, HDMS'08*, Heraklion, Greece, July, 2008
 - *12th Pan-Hellenic Conference of Informatics, PCI'2008*, Samos, Greece, August 2008.
 - *2nd International Workshop on Dynamic Taxonomies and Faceted Search, FIND'07 (at DEXA'2007)*, Regensburg, Germany, September 3-7, 2007.
 - *International Conference on Artificial Intelligence and Applications, AIA'2007*, Innsbruck, Austria, February 12-14, 2007 (and session chair)
 - *5th International Semantic Web Conference, ISWC'2006*, Athens, GA, USA, November 5-9, 2006.
 - *4th International Semantic Web Conference, ISWC'2005*, Galway, Ireland, Nov. 6-10, 2005.
 - *4th Hellenic Data Management Symposium, HDMS'05*, Athens, Greece, Aug. 25-26, 2005.
 - *3rd International Semantic Web Conference, ISWC'2004*, Hiroshima, Japan, Nov. 7-11, 2004.
 - *3rd Hellenic Data Management Symposium, HDMS'04*, Athens, Greece, June 28-29, 2004.
- **Session Chair at the Conferences**
 - *Extended Semantic Web Conference, ESWC'2010, Heraklion, Crete, Greece, June 2010*
 - *International Conference on Databases and Expert System Applications, DEXA'2007*, Regensburg, Germany, September 2007.
 - *International Conference on Artificial Intelligence and Applications, AIA'2007*, Innsbruck, Austria, February 12-14, 2007.
 - *4th Hellenic Conference on Artificial Intelligence, SETN-2006*, Heraklion, Crete, May 2006.
- **Co-Organizer and Program Committee Co-Chair**
 - *1st International Workshop on Peer-to-Peer Computing and Databases (P2P&DB 2004)* Heraklion, Greece, March 14, 2004.

- **External Reviewer**
 - “The Handbook of Technology Management”, John Wiley & Sons, 2008-, for the topic «Web Searching».
- External reviewer of several international conferences and journals including: ICDM’2002, ISMIS’2002, TKDE’2002, VLDB’2003, ICDM’2003, ECML-PKDD’2003, SEKE’2003, WWW’2004, PKDD’2004, IDEAS’2005, PKDD’2005.

Selection of Software Developed

- 2005-2009: More information at <http://www.ics.forth.gr/~tzitzik/software.html>. In brief:
 - Mitos Web Search Engine
 - **StellaSearch: Meta search engine over Google that offers results clustering**
 - GapManager: System for managing dependencies for Digital Preservation
 - PreScan: System for automating the ingestion in digital preservation systems
 - StarLion: System for visualizing RDF
 - SWKM: Participation to the development of the SWKM platform for managing RDF schemas and data
- 2003-2004: Scientific and technical manager of the two-term project “FASTAXON: A system for FAST (and Faceted) TAXONomy design” of the Helsinki University of Technology (HUT). FASTAXON published under the VTT Open Source License.
- 1998-1999: Design and implementation of *GERAKI*, an integrated information system for managing military data of Greek Air Force Units. It is a network application which supports all processes of the Military Office and the Office of Public Relations at 126 Combat Group (Heraklion). Information: Commander's Office at 126 Combat Group (tel. +30 2810 346 746).
- 1998: Design and implementation of *REFEREE*, an information system for sport referee organisations. This application has been installed in the Football Referee Group of Heraklion (6 Piniou St, Heraklion).
- 1995: Design and implementation of *IPOKRATIS*, an information system for doctors. This application has been installed to clinics of Heraklion.
- 1993: Design and implementation of *DOMENICUS* hypermedia engine. *DOMENICUS* has been used for a prototype electronic presentation of the painting exhibition "From El-Greco to Cezzane" held in the National Gallery of Athens in 1992.