Curriculum Vitae

Yannis Tzitzikas

December 2019

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Personal Information

Birth date 27 October 1970 **Birth place** Athens, Greece

Nationality Greek

Marital Status Married, one son Home Address Heraklion Crete

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Current Position Associate Professor of Information Systems at the Computer Science Department

University of Crete, and

Affiliated 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 Associate Professor of Information Systems in the Computer Science Department at University of Crete (Greece) and Affiliated Researcher of the Information Systems Laboratory at FORTH-ICS (Greece). He studied at the University of Crete and he conducted post-doctoral research at (a) the University of Namur (Belgium), (b) ISTI-CNR (Pisa, Italy) and (c) VTT Technical Research Centre of Finland.

His expertise lies in Information Systems, specifically in Knowledge Management and Information Retrieval. His research focuses on semantic data integration, exploratory search, and digital preservation. He has co-authored 3 books and more than 150 papers in refereed journals and conferences (including ACM Computing Surveys, ACM Transactions on the Web, VLDB Journal, IEEE Transactions on Knowledge and Data Engineering, JIIS, JDAPD, ECIR, ISWC, EWSC), he has received two best paper awards (at CIA'2003 and ISWC'07) as well as other awards). He has supervised two PhDs, 24 MSc theses and more than 45 Diploma Theses. He actively participates το EU projects (totaling more than 1,5 MEuros funding for FORTH-ICS) and participates to the scientific committees of several international conferences and journals.

Since 2005 he coordinates the Semantic Access and Retrieval group, and from 2019 also the Centre for Cultural Informatics of the Information Systems Laboratory of FORTH-ICS. He is the coordinator of the Clarity and Open Data Management Team of the University of Crete and he is member of the Executive Committee ERCIM (the European Research Consortium for Informatics and Mathematics).

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 Spyratos, 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.

Work/Research Experience

September 2006 - Now

Currently: Associate Professor in the Computer Science Department of the University of Crete (Assistant Professor from 2006 to 2016, tenured from 2011, Associate Professor since 2016).

February 2006 - Now

Affiliated Researcher of Information Systems Lab (ISL) at FORTH-ICS (Greece) and coordinator of the ISL activity "Information Retrieval and Analysis" and the corresponding group (Semantic Access and Retrieval Group, http://www.ics.forth.gr/isl/sar).

From Sept 2019, also Head of the CCI (Centre for Cultural Informatics) of FORTH/ICS/ISL (http://www.ics.forth.gr/isl/cci)

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-founded research projects.

July 2001 – August 2001

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

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-252 *Object-Oriented Programming* (07-08, 13-14,14-15,15-16,16-17,17-18,18-19,19-20)

CS-351 Information Systems Analysis and Design (06-07, 07-08, 08-09, 09-10, 10-11, 11-12, 12-13)

CS-359 Web Programming (09-10,10-11,11-12,12-13,14-15 with P. Papadakos)

CS-463 *Information Retrieval Systems* (05-06, 06-07, 07-08, 08-09, 09-10, 10-11,11-12,12-13,13-14,14-15,15-16,16-17,17-18)

CS-561 Web Data Management (13-14, 14-15,15-16,16-17,17-18,18-19)

CS-562 Advanced Database Topics (07-08, 08-09, 09-10, 11-12) with N. Spyratos and V.

Christophides

CS-563 Advanced Topics in Information Retrieval (18-19)

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.

Expertise and Research Areas

My expertise and research falls in the intersection of the following areas: Information Systems, Information Indexing and Retrieval, Conceptual Modeling, Knowledge Representation and Reasoning, and Collaborative Distributed Applications. My research has focused on: exploratory searching (principles, techniques, applications mainly for interactive information retrieval), semantic data management (ontologies, comparison functions, knowledge evolution, indexes, query languages, visualization, integration), and methodologies and technologies for building advanced information systems for digital preservation.

Recent Research Projects

Project BlueCloud: Piloting innovative services for Marine Research & the Blue Economy (H2020-

EU.3.2.5.1, grant 862409), 1/10/2019-30/9/2022

Role: Scientific Responsible of FORTH Funding for FORTH: 98, 875 Euro

Project AI4EU (H2020, ICT-26 2018, grant 825619), 1/1/2019 – 31/12/2022

Technical Coordinator of FORTH's activities

Funding for FORTH: 54,562 Euro

Project Prototype Implementation of Centralized Database and Web Platform for Sustainable Seafood Information, 1/1/2018-31/3/2018

Contract between FORTH and Sustainable Fisheries Partnership Foundation

(https://www.sustainablefish.org/)

Role: Scientific Responsible of FORTH Funding for FORTH: 10 K Euros

Project Linked Data-assisted Statistical Spoken Dialogue System 1/4/2017 – 31/3/2019,

Funded by TOSHIBA RESEARCH EUROPE Ltd, Cambridge UK

Role: Scientific Responsible (with Dimitris Plexousakis)

Funding for FORTH: 130,000 Euros

Project «Υπηρεσίες για τη Διασύνδεση και Ολοκλήρωση Μεγάλου Πλήθους Σημασιολογικών Συνολοδεδομένων» 01/08/2017 - 31/10/2019

Hellenic Foundation for Research and Innovation ($EAI\Delta EK$), Hellenic Ministry of Development - General Secretariat for Research & Technology (Hellenic Ministry of Education, and Religious Affairs)

Scientific Responsible. Funding 24,300 Euro

Project **Design of Centralized Database and Web Platform for Sustainable Seafood Information**, Nov 2017 – January 2018

Contract between FORTH and Sustainable Fisheries Partnership Foundation

(https://www.sustainablefish.org/)

Role: Scientific Responsible of FORTH Funding for FORTH: 20 K Euros

Project BlueBRIDGE 1/9/2015-1/3/2018

Scientific Responsible of FORTH-ICS for the project **BlueBRIDGE** (**Building Research environments for fostering Innovation, Decision making, Governance and Education to support Blue growth),** H2020-EINFRA-2015-1

Total funding: 5.295 millions €

Funding for FORTH-ICS: 202,250 Euros.

Project Data transformation and ingestion for LIVEWHAT wiki, 2/8/2016 – 21/9/2016

Scientific Responsible for FORTH-ICS for the project with "ELKE" of University of Crete in the context of the European Project LIVEWHAT - "Living with Hard Times: How European Citizens Deal with Economic Crises and Their Social and Political Consequences" for transforming extracted data and ingesting them to a wiki.

Funding for FORTH: 2544 € (plus VAT 24%)

Project Data Extraction for TransSOL 1/2/2016-29/2/2016

Scientific Responsible of FORTH-ICS for the project with "ELKE" of University of Crete in the context of the European Project TranSOL (European solidarity at a crossroads) for extracting data related to social solidarity structures from websites

Funding for FORTH-ICS: 4,500 € (+ ΦΠΑ 24%)

Project Data Extraction for LIVEWHAT 1/6/2015-31/6/2015

Scientific Responsible of FORTH-ICS for the project with "ELKE" of University of Crete in the context of the European Project LIVEWHAT - "Living with Hard Times: How European Citizens Deal with Economic Crises and Their Social and Political Consequences" for extracting data from websites of 9 European Countries.

Funding for FORTH-ICS: 5,500 €

Project iMARINE 1/11/2011-30/9/2014

Scientific Responsible of FORTH-ICS for the project **iMARINE** (**Data e-Infrastructure Initiative for Fisheries Management and Conservation of Marine Living Resources**), FP7 Data Infrastructure for eScience (INFRA 2011-1.2.2)

Total funding: 5 millions €

Funding for FORTH-ICS: 217.462 Euros

Responsible for whatever was related to semantic data management in the research infrastructure (ontologies, mappings, construction of semantic warehouses, connecting structured with unstructured content).

Project SCIDIP-ES, 1/9/2011 – 31/12/2014

Scientific Responsible of FORTH-ICS for the project SCIDIP-ES (SCIence Data Infrastructure for Preservation - Earth Science), FP7 Data Infrastructure for eScience (INFRA 2011-1.2.2)

Total funding: 6.6 millions €

Funding for FORTH-ICS: 274.760 Euros

Responsible for the deliverables related to the interoperability of models, metadata and semantics, and for the service GapIS (related to dependency management for the needs of digital preservation) of the research infrastructure.

NoE APARSEN, 1/1/2011-31/12/2014

Scientific Responsible of FORTH-ICS for the project (Network of Excellence) **APARSEN** (Alliance Permanent Access to the Records of Science in Europe Network), and Leader of the Work Package Interoperability.

Project number: 269977 Total funding: 6.84 millions € Funding for FORTH-ICS: 255.730 €

COST ACTION IC2002 **MUMIA** (Multilingual and Multifaceted Interactive Information Acess), **2010-2014**National Representative of Greece and Vice Chair of the Working Group on Semantic and Faceted Search (one of the 5 working groups). Co-chair of the program and local organizer of the 3rd
MUMIA Training School, a five days long summer school with 13 internationally well-known lecturers from 9 European countries, and more than 50 students from 17 European countries that took place at the premises of FORTH (July 21-25, 2014).

Project "Ανάπτυξη Δικτύου Επιχειρηματικής και Τεχνολογικής Πληροφορικής" (2011-2014)

ICT expert of the area "Semantic Web Technologies and Information Integration" in the context of a SEV (SEV-Hellenic Federation of Enterprises) project undertaken by FORTH.

Project «Ηράκλειτος II – Ενίσχυση του ανθρώπινου ερευνητικού δυναμικού μέσω της υλοποίησης διδακτορικής έρευνας» 2011-2013 (1/9/2010-30/11/2013)

Scientific responsible of accepted proposal for funding the doctoral studies of Panagiotis Papadakos (who successfully completed his PhD thesis).

Funding: 28,750 Euro

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

Scientific responsible of 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 of 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): \in 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. Budget for FORTH-ICS: 665,400 Euros.

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 Budget for FORTH-ICS: 939.132 Euros.

Publications

In numbers

Publication Type	Number
A. Books (including edited monographs)	3
B. Edited Collections	1
Γ. Book Chapters	12
Δ. Journals (refereed)	42
E. International Conferences (referred):	
E1. Full conference papers (referred)	63
E2. Workshop/symposia papers (referred)	16
E3. Short/demo papers in conferences (referred)	9
E4. Reviewed Abstracts	2
Total of E1-E4: 88	
Z. National Conferences (referred)	15
H. Newsletters	10
Θ. Technical reports and theses	17
I. Scientific responsible for book translations	1

Sum of refereed publications: 161

Selected Publications (of the last 5 years)

- M. Mountantonakis, Y. Tzitzikas, Content-based Union and Complement Metrics for Dataset Search over RDF Knowledge Graphs, ACM Journal of Data and Information Quality, 2019 (accepted for publication)
- M. Mountantonakis, Y. Tzitzikas, Large Scale Semantic Integration of Linked Data: A Survey, ACM Computing Surveys, 52(5), Sept 2019
- M. Mountantonakis and Y. Tzitzikas, Scalable Methods for Measuring the Connectivity and Quality of Large Numbers of Linked Datasets, ACM Journal of Data and Information Quality (JDIQ), 9(3), 2018
- M. Mountantonakis and Y. Tzitzikas, On Measuring the Lattice of Commonalities Among Several Linked Datasets, 42nd International Conference on Very Large Data Bases (VLDB'16), New Delhi, India, September 5-9, 2016
- Y. Tzitzikas, N. Manolis, P. Papadakos, **Faceted Exploration of RDF/S Datasets: A Survey**, Journal of Intelligent Information Systems (JIIS), 2017, 48: 329. doi:10.1007/s10844-016-0413-8
- C. Lantzaki, P. Papadakos, A. Analyti, Y. Tzitzikas, **Radius-aware Approximate Blank Node Matching using Signatures**, Journal Knowledge and Information Systems (KAIS), 50(2), 2017.
- Myron Papadakis and Yannis Tzitzikas, Answering Keyword Queries through Cached Subqueries in Best Match Retrieval Models, Journal of Intelligent Information Systems, 44(1), 2015

Books (including edited monographs) (3)

- A3 Yannis Tzitzikas and Yannis Marketakis, Cinderella's Stick A Fairy Tale for Digital Preservation, Springer 2018, ISBN 978-3-319-98487-2, pp. 1-249
- A2 Yannis Tzitzikas, **Μια Γεύση από Java**, ISBN 978-960-93-8505-3, Leanpub, Oct 2016, http://leanpub.com/JavaTaste
- 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 (12)

- Y. Tzitzikas, Y. Marketakis, N. Minadakis, M. Mountantonakis, L. Candela, F.Mangiacrapa, P. Pagano, C. Perciante, D. Castelli, M. Taconet, A. Gentile and G. Gorell, **Methods and Tools for Supporting the Integration of Stocks and Fisheries**, Chapter in Information and Communication Technologies in Modern Agricultural Development, Springer, 2019.
- M. Mountantonakis, N. Minadakis, Y. Marketakis, P. Fafalios, Y. Tzitzikas, Connectivity, Value and Evolution of a Semantic Warehouse, Accepted for Publication as a book chapter in "Innovations, Developments, and Applications of Semantic Web and Information Systems", 2017
- Pavlos Fafalios and Yannis Tzitzikas, Exploratory Professional Search through Semantic
 Post-Analysis of Search Results, Professional Search in the Modern World, Springer 2014
- Υ. Tzitzikas, Y. Marketakis, V. Christophides, Preservation of Intelligibility of Digital
 Objects, in D.G. Giarretta ed. Advanced Digital Preservation, Springer, 2011
- Yannis Tzitzikas, **Faceted Taxonomy-based Sources**, in G. M. Sacco and Yannis Tzitzikas editors, *Dynamic Taxonomies and Faceted Search*, Springer, 2009.
- Γ7 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.
- 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.
- Giovanni Maria Sacco, Yannis Tzitzikas, **Conclusion**, in G. M. Sacco and Yannis Tzitzikas editors, *Dynamic Taxonomies and Faceted Search*, Springer, 2009.
- 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
- N. Spyratos and Y. Tzitzikas, **Searching**, *Wiley Encyclopedia of Electrical and Electronics Engineering*, John Wiley & Sons, 2003 (DOI: 10.1002/047134608X.W4324)
- Y. Tzitzikas, N. Spyratos 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) (42)

- M. Mountantonakis, Y. Tzitzikas, Content-based Union and Complement Metrics for Dataset Search over RDF Knowledge Graphs, ACM Journal of Data and Information Quality, 2019 (accepted for publication)
- Δ41 E. Dimitrakis, K. Sgontzos and Y. Tzitzikas, A Survey on Question Answering over Linked Data and Documents, Journal of Intelligent Information Systems, DOI: 10.1007/s10844-019-00584-7 (accepted for publication, 2019),
- Δ40 M. Mountantonakis, Y. Tzitzikas, Large Scale Semantic Integration of Linked Data: A
 Survey, ACM Computing Surveys, 52(5), Sept 2019
- M. Mountantonakis, Y. Tzitzikas, LODsyndesis: Global Scale Knowledge Services, Heritage 1(2), On Provenance of Knowledge and Documentation (Selected Papers from CIDOC'2018), MDPI, 2018
- M. Mountantonakis and Y. Tzitzikas, High Performance Methods for Linked Open Data Connectivity Analytics, Information 2018, 9(6), ISSN 2078-2489, Special Issue Semantics for Big Data Integration, MDPI, May, 2018
- M. Mountantonakis and Y. Tzitzikas, Scalable Methods for Measuring the Connectivity and Quality of Large Numbers of Linked Datasets, ACM Journal of Data and Information Quality (JDIQ), 9(3), 2018
- P. Fafalios and Y. Tzitzikas, Stochastic Re-Ranking of Biomedical Search Results based on Extracted Entities, Journal of the Association for Information Science and Technology (JASIST), 68(11), 2017
- Δ35 Y. Tzitzikas, N. Bailly, P. Papadakos, N. Minadakis, G. Nikitakis, **Using preference-enriched** faceted search for species identification, IJMSO 11(3): 165-179 (2016)
- $\Delta 34$ Y. Tzitzikas and E. Dimitrakis, **Preference-enriched Faceted Search for Voting Aid Applications**, IEEE Transactions on Emerging Topics in Computing (accepted for publication).
- Department Proposition 233 P.Papadakos and Y Tzitzikas, Comparing the effectiveness of intentional preferences versus preferences over specific choices: a user study, Int. J. Information and Decision Sciences, Vol. 8, No. 4, 2016
- Δ32 Y. Tzitzikas, N. Manolis, P. Papadakos, Faceted Exploration of RDF/S Datasets: A Survey, Journal of Intelligent Information Systems (JIIS) (accepted for publication)
- Δ31 C. Lantzaki, P. Papadakos, A. Analyti, Y. Tzitzikas, **Radius-aware Approximate Blank Node**

- Matching using Signatures, Journal Knowledge and Information Systems (KAIS), 50(2), 2017
- Δ30 M. Mountantonakis, N. Minadakis, Y. Marketakis, P. Fafalios, Y. Tzitzikas,
 Quantifying the Connectivity of a Semantic Warehouse and Understanding its Evolution over Time, International Journal on Semantic Web and Information Systems (IJSWIS), 12(3),

2016

- Y. Tzitzikas, C. Allocca, C. Bekiari, Y. Marketakis, P. Fafalios, M. Doerr, N. Minadakis, T. Patkos, L. Candella, **Unifying Heterogeneous and Distributed Information about Marine Species through the Top Level Ontology MarineTLO**, International Peer-Reviewed Journal Program: Electronic library and Information Systems, Special Issue on Application of Metadata and Semantics in Science, Emerald, 50(1), 2016
- Pavlos Fafalios, Manolis Baritakis, Yannis Tzitzikas: Exploiting Linked Data for Open and Configurable Named Entity Extraction. International Journal on Artificial Intelligence Tools 24(2), 2015
- Pavlos Fafalios, Panagiotis Papadakos, Yannis Tzitzikas: Enriching Textual Search Results at Query Time Using Entity Mining, Linked Data and Link Analysis. Int. J. Semantic Computing 8(4), 2014
- Panagiotis Papadakos and Yannis Tzitzikas, Comparing the Effectiveness of Intentional
 Preferences versus Preferences over Specific Choices: A User Study, International Journal of
 Information and Decision Sciences (accepted in 2015)
- Y. Tzitzikas, Y. Kargakis, Y. Marketakis, Assisting Digital Interoperability and Preservation through Advanced Dependency Reasoning, International Journal on Digital Libraries (Special Issue on Semantic Digital Archives), 15(2-4), 2015
- Δ24 Pavlos Fafalios and Yannis Tzitzikas, Type-ahead exploratory search through typo and word order tolerant autocompletion, Journal of Web Engineering, 14(1&2), 2015
- C. Strubulis, G. Flouris, Y. Tzitzikas and M. Doerr, A Case Study on Propagating and Updating Provenance Information using the CIDOC CRM, International Journal on Digital Libraries, 15(1), 2014
- $\Delta 22$ Myron Papadakis and Yannis Tzitzikas, **Answering Keyword Queries through Cached Subqueries in Best Match Retrieval Models**, Journal of Intelligent Information Systems, 44(1), 2015
- Δ21 I. Kitsos, K. Magoutis and Y. Tzitzikas, Scalable Entity-based Summarization of Web Search Results using MapReduce, Journal on Distributed and Parallel Databases (DAPD), 32(3), 2014.
- $\Delta 20$ Y. Tzitzikas, M. Kampouraki and A. Analyti, Curating the Specificity of Ontological Descriptions under Ontology Evolution, Journal on Data Semantics, 3(2), 2014.
- $\Delta 19$ Y. Tzitzikas and P. Papadakos, Interactive Exploration of Multidimensional and Hierarchical Information Spaces with Real-time Preference Elicitation, Journal Fundamenta Informaticae, 122(4), 2013.
- S. Zampetakis, Y. Tzitzikas, A. Leonidis and D. Kotzinos, Star-like Auto-Configurable Layouts of Variable Radius for Visualizing and Exploring RDF/S Ontologies, Journal of Visual Languages and Computing, 23(3), 2012.
- 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, 30(3), 2012.
- D. Zeginis, Y. Tzitzikas, V. Christophides, **On Computing Deltas of RDF/S Knowledge Bases**, ACM Transactions on the Web (TWEB), 5(3), 2011.
- Y. Marketakis and Y. Tzitzikas, Dependency Management for Digital Preservation using
 Semantic Web technologies, International Journal on Digital Libraries, 10(4), 2009-2010
- M. Theodoridou, Y. Tzitzikas, M. Doerr, Y. Marketakis, V. Melessanakis, "Modeling and Querying Provenance by Extending CIDOC CRM", J. Distributed and Parallel Databases (Special Issue Call for Papers: Provenance in Scientific Databases), 27(2), 2010.
- Δ13 Y. Tzitzikas, On Providing Intelligibility-Aware Preservation Services for Digital Objects, Data Science Journal, Vol. 8, 2009.
- 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
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- H10 M. Mountantonakis and Y. Tzitzikas, LoDsyndesis: the biggest Knowledge Graph of the Linked open Data Cloud that Includes all Inferred Equivalence Relationships, ERCIM News No. 114, July 2018
- H9 M. Mountantonakis and Y. Tzitzikas, Services for Large Scale Semantic Integration of Data, ERCIM News 2017 (111), October 2017
- N. Bailly, N. Minadakis, P. Papadakos, Y. Tzitzikas, Species Identification through Preference-enriched Faceted Search: Increasing the number of identification tools in FishBase, XV European Congress of Ichthyology (ECI XV), Porto, Portugal, Sept. 2015
- H7 M. Salampasis, Y. Tzitzikas, Report on the 3rd MUMIA Training School on Information Retrieval and Interactive Information Access July 21-25, 2014, FORTH, Heraklion, Crete, Greece, SIGIR Forum 48(2): 111-115, 2014
- M. Herschel, Y. Tzitzikas, K. S. Candan, A. Marian, Exploratory search: New name for an old hat?, SIGMOD Blog, June 21, 2014, Ανακοίνωση βασισμένη στη συζήτηση στρογγυλής τραπέζης που έγινε στο ExploreDB (EDBT 2014), Μάρτιος 2014, Αθήνα.
- H5 Y. Tzitzikas, C. Allocca, C. Bekiari, Y. Marketakis, P. Fafalios and N. Minadakis, **Ontology-based Integration of Heterogeneous and Distributed Information of the Marine Domain**, ERCIM News 2014 (96), Special theme: Linked Open Data, January 2014
- H4 Y. Tzitzikas and Y. Marketakis, **Automating the Ingestion and the Transformation of Embedded Metadata (in CASPAR)**, ERCIM News, January 2010
- H3 Y. Tzitzikas and V. Christophides, **Knowledge Management for Digital Preservation (the CASPAR project experience)**, ERCIM News, January 2010
- H2 Y. Tzitzikas and C. Meghini, "Content-based Retrieval Services in Peer-to-Peer Systems using Taxonomies", ERCIM NEWS, Volume 53, April 2003.
- H1 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 (17)

- Φ17 K. Papantoniou and Y. Tzitzikas, CS563-QA: A Collection for Evaluating Question Answering Systems, arXiv:1907.01611, [cs.CL], coRR, 2019
- M. Psaraki and Y. Tzitzikas, CPOI: A Compact Method to Archive Versioned RDF Triple-Sets, arXiv:1902.04129 [cs.DB], coRR, 2019
- Φ15 A. Kokolaki and Y. Tzitzikas, Facetize: An Interactive Tool for Cleaning and Transforming Datasets for Facilitating Exploratory Search, coRR abs/1812.10734, December, 2018
- ⊙ 14
 C. Lantzaki, Y. Tzitzikas, Tasks that Require, or can Benefit from, Matching Blank Nodes.
 CoRR abs/1410.8536 (2014)
- M. Doerr and Y. Tzitzikas, Information Carriers and Identification of Information Objects:
 An Ontological Approach, arXiv:1201.0385v1 [cs.DL], 2012 (http://arxiv.org/abs/1201.0385)
- Θ 11 C. Meghini, Y. Tzitzikas, V. Coltella, A. Analyti, **Query processing in distributed, taxonomy-based information sources**, CoRR, [cs.DC and cs.DB], Sept. 2011, http://arxiv.org/abs/1109.2425
- M. Hickson, Y. Kargakis and Y. Tzitzikas, Similarity-based Browsing over Linked Open
 Data, CoRR, Digital Libraries, arXiv: 1106.4176 [cs.DL], June 2011, http://arxiv.org/abs/1106.4176
- Θ 9 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.
- Θ 8 P. Papadakos, G. Vasiliadis, Y. Theoharis, N. Armenatzoglou, S. Kopidaki, Y. Marketakis, M. Daskalakis, K. Karamaroudis, G. Linardakis, G. Makrydakis, 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.
- Θ 7 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.
- Y. Tzitzikas and N. Spyratos, 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.
- Ψ Y. Tzitzikas, Collaborative Ontology-based Information Indexing and Retrieval, PhD
 Thesis, Computer Science Department, University of Crete, Greece, September 2002.
- © 3 Y. Tzitzikas, N. Spyratos and P. Constantopoulos, Extended Faceted Ontologies for Web

- Portals, Technical Report FORTH-ICS-TR-293, October 2001.
- Θ 2 Y. Tzitzikas, **View Updates in Knowledge Bases**, Master's Thesis, Technical Report FORTH-ICS-TR-142, October 1995.
- Θ 1 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., (1994-1995)

Miscellanea

- Michalis Mountantonakis and Yannis Tzitzikas, Services for Connecting and Integrating Big Number of Datasets, Poster Presentation at the 12th FORTH RETREAT 2019, Patra, Oct 15-16, 2019
- Scientific responsible for the translation of the book "Dennis, Wixom, Tegarden, **Systems Analysis** and **Design in UML 2.0**", in Greek by Kleidarithmos, 2010.

Recent Deliverables of European Projects

Main responsible or contributor to several deliverables of European projects. Indicatively:

- Responsible for two deliverables of the APARSEN NoE:
 - APARSEN D2501 Interoperability Objectives and Approaches Dec. 2012 http://www.alliancepermanentaccess.org/wp-content/plugins/download-monitor/download.php?id=D25.1+Interoperability+objectives+and+approaches
 - APARSEN D2502 Interoperability strategies, Sept 2013
 http://www.alliancepermanentaccess.org/wp-content/plugins/download-monitor/download.php?id=D25.2+Interoperability+Strategies
- Responsible for the deliverable of SCIDIP-ES:
 - SCIDIP-ES D33.2 Earth Science metadata, semantics and ontology harmonisation report, June 2013
 http://www.scidip-es.eu/assets/Deliverables/SCIDIP-ES-D33.2-V3.0.pdf
- Responsible for the deliverables of the European project CASPAR (characterized "of remarkably high quality" at the review of the 2nd and 3rd year of the project):
 - D2102 Prototype of registry-related KM (Knowledge Management) services (2008)
 - http://www.casparpreserves.eu/Members/cclrc/Deliverables/prototype-of-registry-relatedkm-services-1
 - D2101B Associated draft reports of knowledge management architecture and tools (2008)
 - http://www.casparpreserves.eu/Members/cclrc/Deliverables/associated-draft-reports-of-knowledge-management-architecture
 - D2103 Prototype of Descriptive Information-related KM Services (2008)
 - http://www.casparpreserves.eu/Members/cclrc/Deliverables/prototype-of-descriptive-information-related-km-services-2

Citations

- "Publish or Perish" (on June 2019) returned 1889 citations and h-index equal to 22.
- "Publish or Perish" (on January 2016) returned 1288 citations and h-index equal to 19.
- "Publish or Perish" (on May 2010) returned 498 citations and h-index equal to 12.

Awards and Distinctions

Best Poster Presentation Award-ICS at the 12th FORTH RETREAT 2019, Patra, Oct 15-16, 2019, for the work: Michalis Mountantonakis and Yannis Tzitzikas, Services for Connecting and Integrating Big Number of Datasets.

Recognized Reviewer Award of the 41th European Conference on Information Retrieval (*ECIR*, 2019), 14-18 April, 2019, Cologne, Germany

Best Reviewer Award at the 36th European Conference on Information Retrieval (*ECIR 2014*), 13-16 April, 2014 Amsterdam (one of the four winners)

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.

Organizer of Nationals and International Events

- Local organizer of the EUDAT Summer School on Research Data Management (July 3-7, 2017) at FORTH-ICS
- Responsible from FORTH-ICS, for the co-organization of the RDA-Europe / BlueBRIDGE Datathon on Fisheries and Aquaculture, 15-16 June 2017, Heraklion, Crete, Greece
- Program Co-Chair and Local Organizer of the 3rd MUMIA Training School, a five days long summer school with 13 internationally well-known lecturers from 9 European countries, and more than 50 students from 17 European countries that took place at the premises of FORTH (July 21-25, 2014).

Ιστοσελίδα: http://www.mumia-network.eu/index.php/3rd-training-school-lecturers

- Co-Organizer and Speaker of the the APARSEN Workshop "Long term Preservation of Digital Material and the APARSEN Network of Excellence", 21 PanHellenic Conference of Academic Libraries, Oct 18, 2012, University of Piraeus. Πανελλήνιο Συνέδριο Ακαδημαϊκών Βιβλιοθηκών, Πέμπτη 18 Οκτωβρίου 2012, Πανεπιστήμιο Πειραιά
- Co-Organizer and Program Committee Co-Chair of the 1st International Workshop on Peer-to-Peer Computing and Databases (P2P&DB 2004) Heraklion, Greece, March 14, 2004.

Tutorials and Seminars

- Προοπτικές από την Καλή Διαχείριση και Ολοκλήρωση Δεδομένων, 1η Ερευνητική Συνάντηση του ΚΕΜΕ-ΠΚ, Ρέθυμνο, 26-27 Μαΐου, 2018
- Semantic Integration in the Marine Domain and Beyond, Tutorial at EUDAT Summer School on Research Data Management (3-7 Ιουλίου 2017) στο ΙΤΕ-ΙΠ (https://www.eudat.eu/eudat-summer-school
- Towards Large Scale Semantic Integration of Data for Virtual MultiModal Museums, H2020-CS8-CSA- Virtual Multi-Modal Museum (ViMM), TA4 WGs meeting, Herakion, 24/11/2017
- **Semantic Integration of Marine Data**, BlueBRIDGE Webinar, June 28, 2017 (https://www.youtube.com/watch?v=oqPpnQamoLI&feature=youtu.be)
- Πληροφοριακά Συστήματα ανακτώντας πληροφορία και γνώση στον παγκόσμιο ιστό, Ημερίδα Τμήματος Επιστήμης Υπολογιστών για Μαθητές Λυκείων (2/2/2017)
- **Semantic Integration of Data**, ITN-DCH (Initial Training Network for Digital Cultural Heritage) summer school 2016 (collocated with Computer Graphics International 2016 CGI'16), Heraklion, Crete, Greece, June 27, 2016
- Exploratory Search through Preference-enriched Faceted Search", Invited Seminar given in the Departement Informatique de Blois, Universite de Tours François Rebelais, Blois, France, April 15, 2015 (visit April 14-April 16, 2015)
- Πληροφοριακά Συστήματα ανακτώντας πληροφορία και γνώση στον παγκόσμιο ιστό, Ημερίδα Τμήματος Επιστήμης Υπολογιστών για Μαθητές Λυκείων (3/4/2015)
- Bridging the Web of Documents with the Web of Data at Search Time, 3rd MUMIA (Multilingual and Multifaceted Interactive Information Access, ICT Action COST IC 1002), Training School, July 21-25, 2014, Heraklion, Greece
- Responsible for producing training material (slides, exercises, video lectures) for the APARSEN summer school (advanced practitioner course) that took place in Vienna 7-11 July 2014. The same role for the training day of APARSEN on "Usability and Accessibility" at Florence, Sept 17-18, 2014
- 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.

Selected Demonstrations

Towards Global Scale Semantically Integrated Data, Presentation and demonstration at the visit at FORTH
of Dr. Li Meng, Vice Minister of Science and Technology of China, and the Chinese delegation, FORTH, May
19, 2018.

Service and Committee Participation

- Computer Science Department, University of Crete
 - Representative of the Computer Science Department in the Special Account for Research
 Grants (ΕΛΚΕ) of the University of Crete (Feb 2018- today)
 - o Chair of the Safety and Health Committee (2013-today)
 - o Member of the Graduate Studies Committee (2010-2012, 2018-today)
 - o Member of the Internal Evaluation Team (OM.E.A) of the Department (2018- today)
 - o Member of the Undergraduate Studies Committee (2013-2014, 2016-2018)
 - Representative of the Assistant Professors in the University Senate of the Faculty of Sciences and Engineering, 2008-2009
 - O Deputy Scientific Responsible of the Student Internship Program (2009-2012)

Other Contributions to the Department and the University

- Coordinator of the Clarity and Open Data Management Team of the University of Crete (Decision of the 396th / 01-11-2018 Meeting of the Senate of the University of Crete), 17/12 / 2018 - 16/12/2020
 - O The team completed a round of work that lasted about two years. During that period, it recorded the data held by the University, it characterized them, instituted the relevant management bodies and procedures, issued the relevant formal decision (about the recording and characterization of the data it holds), and installed and customized an open data catalog that was made public on 18/20/2019 (http://opendata.uoc.gr/)
- Representative of the University of Crete to the Working Group on Digital Skills and Competences
 of the Ministry of Education, Research and Religious Affairs (July 2017- now)
- Coordinator of the Open Data Working Group of the University of Crete (26/6/2017-now)
- Technical coordinator of the project for designing and implementing the new web site of the Computer Science Department of the University of Crete that took place the period Sept 2016 –April

2017 which became the official web site of the Department on March 2017 (that relies on content management system build from scratch in a voluntary basis with students).

Memberships to National and International Committees

- Executive Committee Member of the ERCIM (the European Research Consortium for Informatics and Mathematics, Sept 2018-today
- Program Committee Member of the following international and national conferences:
 - 14th International Workshop on Information Search, Integration and Personalization, Madrid, Spain, June 2020.
 - O Post-proceedings of the te 13rd International Workshop on Information Search, Integration and Personalization (ISIP'2019)
 - o 42nd European Conference on Information Retrieval (ECIR 2020), Lisbon, April 2020
 - o 13th International Conference on Metadata and Semantics Research (MTSR'19), Guglielmo Marconi University in Rome, Italy, Oct. 28-31, 2019
 - 23rd International Conference on Theory and Practice of Digital Libraries (TPDL), Oslo, Norway, September 9-12, 2019.
 - The 13rd International Workshop on Information Search, Integration and Personalization (ISIP'2019), May 2019, Heraklion Crete
 - o 2nd Intl. Workshop on Big Data Visual Exploration and Analytics (BigVis 2019)
 - o 41st European Conference on Information Retrieval (ECIR 2019)
 - o 22nd International Conference on Theory & Practice of Digital Libraries (TPDL2018)
 - 5th International Workshop on Exploratory Search in Databases and the Web (ExploreDB2018),
 collocated with SIGMOD 2018
 - o 40th European Conference on Information Retrieval [http://www.ecir2018.org/], which will be held in Grenoble, France, between March 26 and 29, 2018
 - o International Workshop on Big Data Visual Exploration and Analytics (BigVis 2018)", satellite workshop of (EDBT/ICDT 2018).
 - o 21st International Conference on Theory & Practice of Digital Libraries (TPDL2017)
 - o 4th International Workshop on Exploratory Search in Databases and the Web (ExploreDB2017)
 - 39th European Conference on Information Retrieval, ECIR 2017
 - 25th ACM International Conference on Information and Knowledge Management (CIKM 2016),
 October 24-28, 2016, Indianapolis, United States
 - 4th International Workshop DChanges 2016, Vienna, Austria
 - 20th International Conference on Theory and Practice of Digital Libraries (TPDL'2016), Sept 5 9 2016, Hannover, Germany
 - 8th International Conference on Knowledge Engineering and Ontology Development (KEOD'16), Nov. 9-11 2016, Porto, Portugal
 - 9th International Conference on Metadata and Semantics Research (MTSR'16), Nov 22-25 2016,
 Rome, Italy
 - 3rd International Workshop on Exploratory Search in Databases and the Web (ExploreDB), June
 26, 2016, San Francisco (in conjunction with SIGMOD/PODS 2016).
 - 9th Hellenic Conference on Artificial Intelligence (SETN 2016), May 18-20, 2016, Thessaloniki,
 Greece

- 3rd International Workshop on (Document) Changes: modeling, detection, storage and visualization, DChanges 2015, Part of ACM DocEng 2015
- o 19th International Conference on Theory and Practice of Digital Libraries, TPDL'15
- Special Track on Open Repositories, Research Information Systems and Data Infrastructures at the 9th International Conference on Metadata and Semantics Research (MTSR'15) (http://www.mtsr-conf.org/)
- 2nd International Workshop on Exploratory Search in Databases and the Web (ExploreDB), in conjunction with SIGMOD/PODS 2015.
- o 37th European Conference on Information Retrieval, ECIR'15
- The 3rd Open Interdisciplinary MUMIA Conference and 7th Information Retrieval Facility Conference (IRFC2014)
- Special Track on Open Repositories, Research Information Systems and Data Infrastructures at the 8th International Conference on Metadata and Semantics Research (MTSR'14) (http://www.mtsr-conf.org/).
- o 2nd International Workshop on (Document) Changes: modeling, detection, storage and visualization, DChanges 2014, Part of ACM DocEng 2014
- Senior PC Member, Digital Libraries 2014, ACM/IEEE Joint Conference on Digital Libraries
 (JCDL 2014) International Conference on Theory and Practice of Digital Libraries (TPDL 2014)
- 1st International Workshop on Exploratory Search in Databases and the Web, ExploreDB 2014 (@EDBT, Athens 2014)
- o 36th European Conference on Information Retrieval, ECIR'14
- o 1st International Workshop on (Document) Changes: modeling, detection, storage and visualization, DChanges 2013, Part of ACM DocEng 2013.
- o 7th International Conference on Metadata and Semantics Research, MTSR'13.
- o 6th Information Retrieval Facility Conference, IRFC'13.
- o International Conference on Theory and Practice of Digital Libraries 2013, TPDL 2013.
- International Workshop on Integrating IR technologies for Professional Search, part of ECIR
 2013.
- o 2nd Conference on Information Technologies for Performing Arts, Media Access and Entertainment, ECLAP 2013.
- o 12th IASTED International Conference on Artificial Intelligence and Applications, AIA 2013.
- o Information Retrieval Facility Conference, IRFC 2012.
- 1st Conference on Information Technologies for Performing Arts, Media Access and Entertainment, ECLAP 2012.
- 5th International Conference on Metadata and Semantics Research, Special Track on Metadata
 & Semantics for Open Access Repositories & Infrastructures, MTSR'12, Cadiz, Spain.
- o 4th International IRF (Information Retrieval Facility) Conference, July, IRF 2011.

- 5th International Conference on Metadata and Semantics Research, Special Track on Metadata
 & Semantics for Open Access Repositories & Infrastructures, MTSR'11.
- o International Conference on Artificial Intelligence and Applications, AIA'2010, Innsbruck, Austria, February 2010.
- o International Conference on Web Information Systems and Mining, WISM'2009, Shanghai, China, November 2009.
- o 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.
- o 3rd International Workshop on Dynamic Taxonomies and Faceted Search, FIND'08 (at DEXA'2008), Torino, Italy, September 2008.
- o 7th Hellenic Data Management Symposium, HDMS'08, Heraklion, Greece, July, 2008
- o 12th Pan-Hellenic Conference of Informatics, PCI'2008, Samos, Greece, August 2008.
- o 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 (και πρόεδρος μια συνεδρίας)
- 5th International Semantic Web Conference, ISWC'2006, Athens, GA, USA, November 5-9, 2006.
- o 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.
- o 3rd Hellenic Data Management Symposium, HDMS'04, Athens, Greece, June 28-29, 2004.

• Session Chair at the Conferences

- Invited (by Prof. Athman Bouguettaya) to chair a session at WISE'2011 (Syndey, Austrailia, Oct. 2011). Declined due to other obligations.
- o Extended Semantic Web Conference, ESWC'2010, Heraklion, Crete, Greece, June 2010
- o International Conference on Databases and Expert System Applications, DEXA'2007, Regensburg, Germany, September 2007.
- o International Conference on Artificial Intelligence and Applications, AIA'2007, Innsbruck, Austria, February 12-14, 2007.
- o 4th Hellenic Conference on Artificial Intelligence, SETN-2006, Heraklion, Crete, May 2006.

• External Reviewer

 Member of the Editorial Board of the Special Issue on "Expressive Natural Language Interfaces for the Semantic Web" of the Semantic Web journal, Oct 2016

- Guest member of the editorial team of the special issue of Marine Geology Data (2015) of the journal Earth Sciences (ISSN:2328-5974)
- o Senior Associate Editor of the Data Science Journal (http://dsj.codataweb.org/), International Council for Science (ICSU), 2008-2011
- o Reviewer to several international conferences and journals

• Reviewer of Research Proposals

- External reviewer of the third project call within the thematic programme "Information and Communication Technology" of the Vienna Science and Technology Fund (WWTF), 2018
- Ad honorem reviewer of the Chilean National Science and Technology Commission (CONICYT
 Chile), July 2017

Systems Design and Development

Several research results have leaded to innovative tools and systems designed and developed in collaboration mainly with students that I have supervised. More information and links are available at: http://www.ics.forth.gr/~tzitzik/software.html.

2007-2016

Exploratory (Web) Searching

- **X-Search**: Semantic Post-Processing of Search Results. First release: 2013
- **Hippalus**: Preference-Enriched Faceted Exploration. First release: 2013
- **IOS**: A family of novel services for exploratory search. First release: 2012
- Mitos: A Web Search Engine (with emphasis on exploratory search). First release: 2007
- **StellaSearch**: A Meta Search Engine over Google offering real time results clustering. First release: 2009
- **FleXplorer**: A general purpose API for supporting exploratory search. First release: 2009
- **SofoKles**: A tool for evaluating natural language stemmers. First release: 2008

Semantic Data Management

- 3D LOD: Interactive 3D Visualization of the LOD Cloud. First release 2016
- LODSyndesis: A Suite of Indexes and Services for Connecting and Exploiting Large in Number Linked Datasets. First release 2016
- **SPARQL-LD**: An extension of SPARQL 1.1 Federated Query that allows to use in the SERVICE operator any Web resource (URI/IRI) containing RDF data. First release 2016
- X-Link: A configurable, Linked Data-based, Named Entity Extraction tool. First release 2014
- MatWare: Tool for automating the creation of Semantic Warehouses. First release 2014
- **Bnodeland** (the land of blank nodes): Compare RDF Graphs with Bnode Matching! First release 2012. Also a generator of synthetic data. First release 2014

- **RIMQA** (RDF Instance Migration Quality Assistant): A tool for quality management after schema migration. First release: 2012.
- **StarLion**: A tool for visualizing RDFS ontologies (with emphasis on top-K diagrams and on exploration services). First release: 2008

Digital Preservation (tools and systems)

- **Epimenidis**: Automated Reasoning for Digital Preservation. First release 2013
- **PreScan**: Automated extraction of file-embedded metadata from file systems. First release: 2008
- **GapManager**: A dependency management system for the preservation of digital objects. First release: 2008

• 2005-2007:

- SWKM: Participation to the development of the SWKM (Semantic Web Knowledge Middleware) 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.

Datasets

Publicly available datasets for research purposes, created/maintained under my supervision

- CS563QA-Evaluation-Collection, A collection for evaluating Question Answering systems, URL: http://islcatalog.ics.forth.gr/dataset/cs563-qa-an-evaluation-collection-for-question-answering, Creation date: July 2019
- FRUCE (Finding Relevant User Comments Evaluation Collection), a collection for evaluating the retrieval of user reviews/comments about hotels, URL: , http://islcatalog.ics.forth.gr/dataset/fruce-v2, Creation date: Oct 2018
- Διάφορες οντολογίες, όπως η MarineTLO (http://www.ics.forth.gr/isl/MarineTLO)

Student Supervision

Role	Completed	Ongoing
a) Supervisor of PhD students	2	2
b) Member of the Advisory Committee of PhD Theses (beyond a)	4	0
c) Supervisor of MSc students	24	2
d) Supervisor of Diploma Theses	47	1
Total		

• Supervisor of PhD Theses (2 completed, 2 ongoing)

- 1. Maria Papadaki (ongoing)
- 2. Michalis Mountantonakis (ongoing)
- 3. Pavlos Fafalios (2016)

Title: Exploiting Linked Data for Entity-Centric Exploratory Search

4. Panagiotis Papadakos (2013)

Title Interactive Exploration of Multidimensional Information Spaces with Real-time Preference Elicitation

• Member of the Advisory Committee of PhDs (beyond the supervised ones) (4 completed, 0 ongoing)

1. Dimitris Pritsos (2019)

Dept. of Information and Communication Systems Engeneering, University of the Aegean

Title: Open-set Web Genre Identification

2. Vassilis Efthimiou (2017)

Title: Scalable Entity Resolution

3. Y. Georgalis (2013)

Title: Architecture, methods and tools for Environments of Ambient Intelligence

4. Haridimos Kondylakis (2010)

Title: Ontology Evolution in Information Integration Systems

• External Evaluator of PhD Theses (2)

- 1. International Opponent of the Ph.D. candidate Anastasia Lantseva, ITMO University, St Petersburg, Russia, January 2020
- 2. External Evaluator of the Doctoral Dissertation: Luca Frosini, Transactional REST Information System for Federated Research Infrastructures enabling Virtual Research Environments, Universita di Pisa, Dipartimento di Ingegneria Dell' Informazione, May 2019

• Supervisor of MSc Students (24 completed, 2 ongoing)

1. Kostas Manioudakis (2020)

Title: Not finalized yet

2. George Kadilierakis (2020)

Title: Not finalized yet

3. Lefteris Dimitrakis (2019)

Title: Open Domain Question Answering over Hundreds of Linked Open Datasets

4. Konstantinos Sgontzos (2019)

Title: On Achieving High Quality User Reviews Retrieval in the Context of Conversational Faceted Search

5. Anna Kokolaki (2018)

Title: "Facetize: An Interactive Tool for Cleaning and Transforming Datasets for Facilitating their Exploration

6. Thanos Yannakis (2017)

Title «SPARQL extensions for Linked Data»

7. Maria-Evaggelia Papadaki (2017)

Title: 3D Visualization of Linked Datasets

8. Panagiotis Lionakis (2017)

Title: Exporatory Search of RDF Datasets with Geospatial Information

9. Vaggelis Kaligiannakis (2016)

Title: Caching for Client-side Browsing of SPARQL Endpoints

10. Michalis Mountantonakis (2016)

Title: «Measuring the Degree of Connectivity of the LOD Cloud

11. Nikos Anyfantis (2016)

Title: Mappings Management for Ontology-based Integration

12. Manolis Baritakis (2016)

Title: Using Linked Data for Named Entity Extraction and Disambiguation

13. Yannis Kargakis (2013)

Title: Dependency Management for Digital Preservation

14. Ioannis Kitsos (2013)

Title: Scalable entity-based summarization of web search results using MapReduce

15. Christina Lantzaki (2013)

Title: Matching Blank Nodes in RDF/S Graphs

16. Pavlos Fafalios (2013)

Title Indexes and Algorithms for Scalable and Flexible Instant Overview Search

17. G. Tsamis (main supervisor: Martin Doerr, 2012)

Title: A 3D Tool for Schema Mapping

18. Nikos Manolis (2011)

Title: Interactive Exploration of Fuzzy RDF Knowledge Bases

19. M. Psaraki (2011)

Title: Compact Archiving of Multiple (and possibly Versioned) RDF/S Triple Sets

20. M. Kabouraki (2011)

Title: Managing Resource Description Specificity under Ontology Schema Evolution

21. Y. Marketakis (2010)

Title: Conceptual Modeling and Tools for Digital Preservation

22. M. Papadakis (2010)

Title: Set Cover-based Results Caching for Best Match Retrieval Models

23. N. Armenatzoglou (2010):

Title: Efficient Faceted Exploration Services for Big Volumes of Information

24. Martin Krčmář (2009)

Title: Visualization of RDF Deltas, co-supervision with Prof. Pavel Smrz (Brno University of Technology, Czech Republic),

25. S. Kopidaki (2009),

Title: Results Clustering in Web Searching

26. D Zeginis (2008)

Title: «On Computing Deltas of RDF/S Knowledge Bases, co-supervision with Prof. V Christophides

• Supervisor of Diploma Thesis (48: 47 completed, 1 ongoing)

- 1. E. Chroniari, Web search engines for kids: state-of-the art and challenges, 2019-
- 2. Antrei Kavros, Design of a Phonetic Algorithm for the Greek Language, 2019
- 3. Michalis Panagiotou, Implementation of a System for Recording and Visualizing the Traffic Incidents in the city of Heraklion, 2019
- 4. Stelios Karakoudis, Design of a System for Recording and Visualizing the Traffic Incidents in the city of Heraklion, 2019
- 5. Victor Lecompte, Give: Design and Development of a Work Exchange Platform, 2019
- 6. Dimitris Giouzoulis, Design and Implementation of a question answering system over Relational Databases through Spoken Dialogue V2", 2019
- 7. Anastasios Karamesousis, "Design and Implementation of a question answering system over Relational Databases through Spoken Dialogue", 2019
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- 15. D. Nikas, Android Help application for First Aid diagnosis treatment and accident detection emergency message dispatcher, 2017
- 16. K. Manioudakis, Implementation of a CMS for the Website of the Department, 2017
- 17. K. Sgontzos, Extending Hippalus with multicore/gpgpu-based triplestores, 2016
- 18. L. Dimitrakis, Extension of Hippalus for using it as Voting Advice Application, 2016
- 19. E. Giannopoulos, Design and implementation of Android Application for multiple-choice tests, ongoing, 2016
- 20. G. Kantilierakis, Design and implementation of Android Application for multiple-choice tests, 2016
- 21. P. Papamichail, Design and implementation of a E-learning system as a Role Playing Game, 2016
- 22. G. Nikitakis, Faceted Search with Like and Dislike Preferences 2015
- 23. Y. Moutafis, Development of a Web-based GIS Application with open source tools, 2015
- 24. M. Stratigi, Evaluation of greeklish to greek translators, 2015
- 25. A. Mavroulakis, Development of tools for transforming and loading data to system Hippalus, 2015
- 26. Th. Yannakis, Development of a Generator of Synthetic RDF Data with emphasis on the morphology of Blank Nodes, 2014
- 27. I. Siopis, Design and Implementation of a Website for the Department, 2014
- 28. M. Mparitakis, Entity Mining using Linked Data, 2014
- 29. M. Mountantonakis, Design and Implementation of Metrics for Semantic Warehouses, 2014

- 30. I. Zidianaki, Design and Implementation of a System for Civil Protection accessible through Smart Phones, 2013
- 31. D. Zafiri, A System for Browsing RDF/S data, 2012
- 32. M. Hickson, Design and Development of a system for Browsing Movies using Semantic Web Technologies with Emphasis on Clustering Services, 2011
- 33. Y. Kargakis, Design and Development of a system for Browsing Movies using Semantic Web Technologies with Emphasis on Similarity Functions, 2011
- 34. E. Souris, Design and implementation of the System "FilmCovery", 2011
- 35. N. Klidis, Design and Development of the System "FilmCovery", 2011
- 36. S. Tsironis, Extensions of the System "Diathesis", 2010
- 37. D. Kastrinakis, Scalable Autocompletion Services for Web Search Engines, 2010
- 38. D. Pontikis, Design and Implementation of a Personal Search Engine, 2010
- 39. Y. Kitsos, Dynamic Entity Mining in Web Searching, 2010
- 40. D. Komitopoulou, A System for Transforming Ontological Metadata, 2010
- 41. K. Sidiropoulos, Design and Implementation of a Web Crawler, 2009
- 42. S. Zabetakis, Visualization of RDF Schemas, 2009
- 43. K. Tsintaris, Design and Implementation of a Web Crawler for Mitos, 2009
- 44. T. Tzanakis, Automatic file scanner for Digital Preservation, 2009
- 45. Y. Marketakis, Dependency Management for Digital Preservation, 2008
- 46. M. Tavals, K-means based Results Clustering, 2007
- 47. A. Pitsiladis, A System for Resource Management for the Department of Computer Science, 2007
- 48. 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.

End of Curriculum Vitae