

# Curriculum Vitae

December 2016

## Dimitrios Plexousakis

Professor

Department of Computer Science  
University of Crete

### PERSONAL INFORMATION

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### CURRENT POSITION

*Professor*, Department of Computer Science, University of Crete (as of 07/07)

*Affiliated Researcher*, Information Systems Laboratory, Institute of Computer Science, FO.R.T.H (as of 06/99) – Head of Laboratory as of 01/12

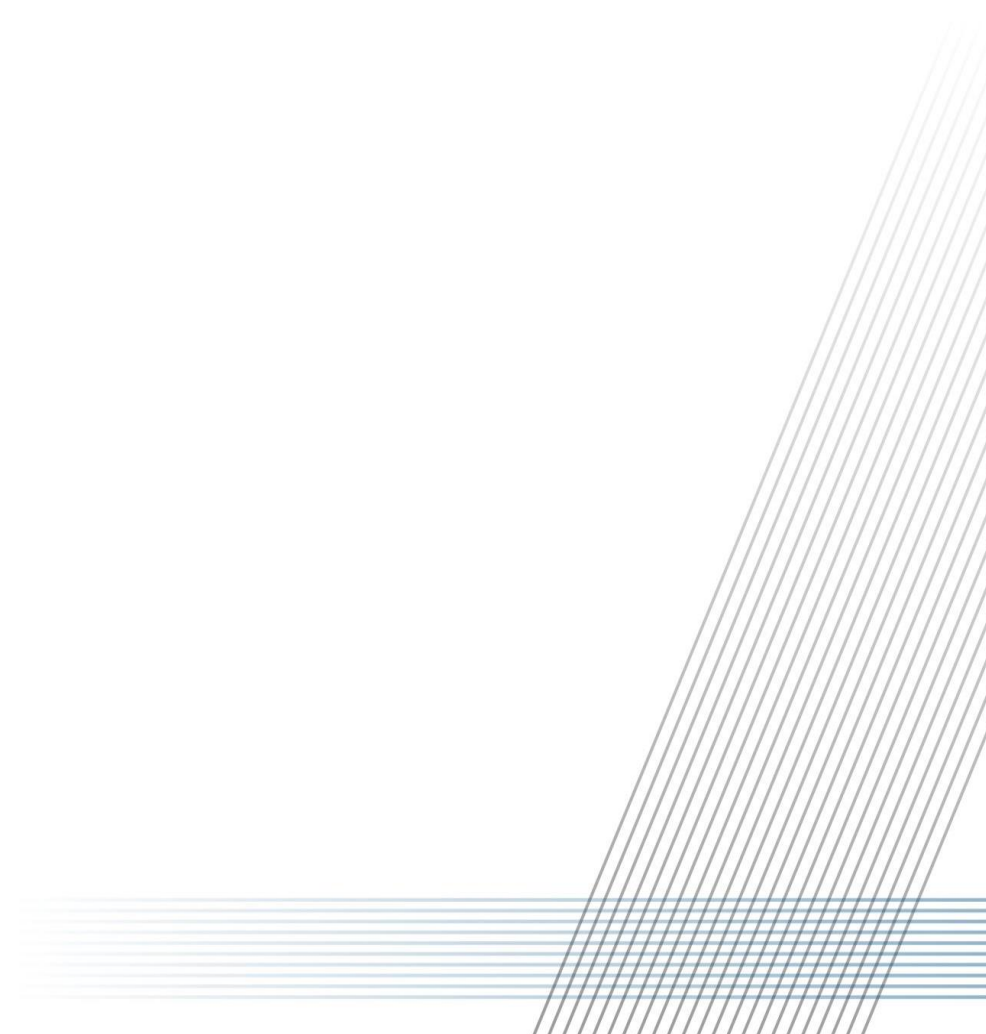
*Chair*, Scientific Council, National Documentation Center (2/2014 – to date, appointed by the Ministry of Education, General Secretariat of Research and Technology)

### DEGREES OBTAINED

- *Doctor of Philosophy* (PhD) in Computer Science, January 1996, Department of Computer Science, University of Toronto, Toronto, Canada
- *Master of Science* (MSc) in Computer Science, September 1990, Department of Computer Science, University of Toronto, Toronto, Canada
- *Bachelor of Science* (BSc) in Computer Science (grade Excellent: 8,72/10), July 1988, Department of Computer Science, University of Crete, Greece

## RESEARCH INTERESTS

My research interests are in the broader area of Data and Knowledge Management:

- Knowledge Representation and Reasoning
  - Conceptual Modeling
  - Knowledge Base Management Systems
  - Knowledge Representation and Management on the Semantic Web and in Ambient Intelligence Environments
  - KR Techniques in Cognitive / social Robotics
  - Web-based Information Systems
  - Service-Oriented Architectures
  - Discovery and Composition of E-Services
  - Business Process Modeling and Analysis
  - Temporal, Active and Deductive Databases
  - Applications of Information Systems in Bioinformatics (with emphasis on Semantic Integration)
  - Digital Libraries
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## ACADEMIC AND RESEARCH EXPERIENCE (after the PhD Degree was obtained)

- [July 2007 – to date] *Professor*, Department of Computer Science, University of Crete
- [November 2002 – June 2007]: *Associate Professor*, Department of Computer Science, University of Crete
- [March 2000 – October 2003]: *Assistant Professor*, Department of Computer Science, University of Crete
- [June 1999 – to date]: *Affiliated Researcher*, Information Systems Laboratory, Institute of Computer Science, FO.R.T.H; *Head of Information Systems Laboratory* (1/2012 – to date)
- [December 2009 – December 2013] *Director*, Data Processing Laboratory, School of Sciences, University of Crete
- [September 2006 – August 2010] *Chair*, Department of Computer Science, University of Crete
- [January 2005]: Visiting Researcher, Universite de Paris-Sud (Orsay), Paris, France (during sabbatical leave)
- [December 2004] : Visiting Researcher, CNAM, Paris, France (during sabbatical leave)
- [September 2004 – October 2004]: *Visiting Professor*, Department of Knowledge Engineering, School of Computer Science, University of Vienna, Vienna, Austria (during sabbatical leave)
- [March 1999 – February 2000] : *Visiting Professor*, Department of Computer Science, University of Crete
- [August 1997 – July 1998] : *Assistant Professor (tenure-track)*, Department of Computer Science and Engineering, University of South Florida, Tampa, FL., USA
- [August 1995 – July 1997] : *Visiting Professor*, Department of Computing and Information Sciences, Kansas State University, Manhattan, KS., USA
- [July 1996 – August 1996]: Visiting Researcher, Department of Computer Science, University of Toronto, Toronto, Canada

## OTHER WORK EXPERIENCE

- [September 1993 – January 1997] *Consultant*, KBS Technology Inc., Richmond Hill, Ontario, Canada
- [January 1992 – August 1995] Research Assistant, Department of Computer Science, University of Toronto, Toronto, Canada
- [Spring 1991, Summer 1992] *Instructor*, George Brown College of Applied Arts and Technology, Toronto, Ontario, Canada.
- [September 1988 – June 1995] Teaching Assistant, Department of Computer Science, University of Toronto, Toronto, Canada
- [June 1986 – July 1988] *Programmer - Student fellow*, Institute of Computer Science, FO.R.T.H
- [June 1985 – May 1986] *Programmer - Student fellow*, Computing Center, University of Crete

## TEACHING EXPERIENCE

- At the University of Crete, I currently teach or have taught the following courses:
  - (a) Undergraduate
    - HY180 (Introduction to Logic),
    - HY 340 (Compilers),
    - HY 360 (Files and Databases),
    - HY 460 (Database Management Systems)
  - (b) Graduate
    - HY 567 (Knowledge Representation and Reasoning)
    - HY 565 (Business Process and Workflow Management Systems),
    - HY 662 (Spatial and Temporal Databases),
    - HY 562 (Advanced Topics in Databases)
- At the University of South Florida I taught the following courses:
  - (a) Undergraduate
    - CIS4600: Operating Systems
    - COP2002: Introduction to Computer Science
    - COP2000: Introduction to Computer Science-Laboratory
  - (b) Graduate
    - CIS6930: Advanced Topics in Databases
- At Kansas State University I taught the following courses:
  - (a) Undergraduate
    - CIS560: Database System Concepts
  - (b) Graduate
    - CIS730: Principles of Artificial Intelligence
    - CIS761: Database Management Systems
    - CIS764: Database Design
    - CIS860: Distributed Databases
    - CIS890: Database Systems for Advanced Applications
- At the University of Vienna I taught the following graduate courses:
  - Introduction to Semantic Web Technologies
  - Technologies for Web Services
- At the University of Toronto I taught the undergraduate course
  - CSC270: Introduction to Modeling and Optimization
- At the George Brown College of Applied Arts and Technology I taught the courses: IS100: Introduction to Programming and IS201: Programming in C
- As teaching assistant at the Department of Computer Science, University of Toronto, I taught tutorial sections of:
  - CSC434: Data Management Systems
  - CSC324: Principles of Programming Languages
  - CSC382: Numerical Methods I
  - CSC180: Introduction to Computer Programming with FORTRAN
  - CSC148: Introduction to Computing with Turing
  - CSC104: How Computers are Used

## AWARDS AND HONORS

- Top-cited article award for the years 2005-2010 for the journal “Engineering Applications of Artificial Intelligence” published by Elsevier
- Best paper awards at RULE-ML’12, SETN’08, STAIRS’06 and ISWC’03
- Graduate Fellowship, Department of Computer Science, University of Toronto, 1992-1994
- Open Fellowship, University of Toronto, 1988 – 1991
- Fullbright Foundation Scholarship for Graduate Studies, 1988
- Scholarship of the National Scholarship Foundation for excellence in undergraduate studies, 1986-1988
- University entrance Scholarship, entry rank: 2, Department of Computer Science, University of Crete, 1984

## PUBLICATIONS

Citation indices (source: Google Scholar / Harzing's Publish or Perish) on 10/12/2016

- h-index: 37
- i10-index: 78
- total number of citations: 5354

### A. JOURNAL PUBLICATIONS (Full article review)

[TKDP16] G. Troulinou, H. Kondylakis, E. Daskalaki and **D. Plexousakis**, "Ontology Understanding without Tears: the Summarization Approach", in Journal of Web Semantics, 2016 (to appear)

[BDK+16] M. Bitsaki, M. Dramitinos, G. Koutras, **D. Plexousakis** and A. Psycharaki, "Collective Utility in Hierarchical Structures of Collective Adaptive Systems: an Application in Transportation Systems", in Journal of Computer Science - Research and Development, Springer, 2016 (to appear).

[KPP16] K. Kritikos, **D. Plexousakis** and P. Plebani, "Semantic SLAs for Services with Q-SLA", in Procedia Computer Science, Elsevier, vol. 97, pp. 24-33, 2016.

[PPCA16] T. Patkos, **D. Plexousakis**, A. Chibani and Y. Amirat, "An Event Calculus Production Rule System for Reasoning in Dynamic and Uncertain Domains", International Journal on the Theory and Practice of Logic Programming (Special Issue on RuleML 2014) 16(03), pp. 325-352, 2016.

[SKP15] M. Skouradaki, M. Kalogiannakis and D. Plexousakis, "Enhancing Learning Management Systems towards Adaptivity: a Case Study", International Journal of Teaching and Case Studies, 6 (2), pp 108-123, 2015.

[ZKP15b] C. Zeginis, K. Kritikos and **D. Plexousakis**, "Event Pattern Discovery in Multi-Cloud Service-Based Applications", International Journal of Systems and Service-Oriented Engineering, Special Issue on Service-Oriented Architecture in the Era of Big Data, 5(4), pp. 78-103, 2015.

[ZA+15] F. Zablith, G. Antoniou, M. d'Aquin, G. Flouris, H. Kondylakis, E. Motta, D. Plexousakis, M. Sabou, "Ontology Evolution: A Process Centric Survey", in The Knowledge Engineering Review, 30(1), pp 45-75, 2015.

[BKP14] G. Baryannis, K. Kritikos and D. Plexousakis, "A Specification-based, QoS-Aware Service Composition and Verification Framework", IEEE Transactions on Services Computing, 2014 (under revision).

[PPPM14] N. Papadakis, P. Petrakis, D. Plexousakis and C. Manifavas, "A Solution to the Ramification Problem Expressed in Temporal Description Logics", in International Journal of Semantic Computing, 8 (1), pp. 1-46, 2014.

[KP13b] K. Kritikos and **D. Plexousakis**, "Novel Optimal and Scalable Non-Functional Service Matchmaking Techniques", in IEEE Transactions on Services Computing, 7 (4), pp. 614-627, Oct-Dec 2014.

[KP13a] H. Kondylakis and **D. Plexousakis**, "Ontology Evolution without Tears", in Journal of Web Semantics, 19, pp 42-58, 2013.

[KPP13] K. Kritikos, F. Paterno and **D. Plexousakis**, "Task Model Driven Realization of Interactive Application Functionality through Services", in *ACM Transactions on Interactive Intelligent Systems*, 3 (4), Article No. 25, 2014.

[PS+11] N. Papadakis, K. Stravoskoufos, E. Baratis, E. Petrakis and **D. Plexousakis**, "PROTON: A Prolog Reasoner for Temporal ONtologies in OWL", *Expert Systems with Applications*, 38 (12), pp 14660-14667, 2011.

[PP+11b] N. Papadakis, **D. Plexousakis**, and Y. Christodoulou, "The Ramification Problem in Temporal Databases: a Solution Implemented in SQL", *Applied Intelligence - the International Journal of Artificial Intelligence, Neural Networks, and Complex Problem-Solving Technologies*, 36 (4), pp 749-767, 2012.

[PP+11a] N. Papadakis, **D. Plexousakis**, M. Papadakis and H. Manifavas, "The Ramification Problem in Temporal Databases: An Approach with Conflicting Constraints", *Journal of Intelligent Information Systems*, 38 (1), pp 41-94, 2012.

[PPA10] N. Papadakis, **D. Plexousakis**, and G. Antoniou, "The Ramification Problem in Temporal Databases: Concurrent Execution", *International Journal of Intelligent Systems*, vol. 25 (4), pp. 287-325, 2010.

[KP09b] K. Kritikos and **D. Plexousakis**, "Requirements for QoS-based Web Service Description and Discovery", *IEEE Transactions on Services Computing*, vol. 2, no. 4, pp. 320-337, 2009.

[WKPH09] R. Woitsch, D. Karagiannis, **D. Plexousakis**, and K. Hinkelmann, "Business and IT Alignment: the IT Socket", *E&I Journal*, vol. 126, no. 7, pp. 308-321, 2009.

[KP09a] K. Kritikos and D. Plexousakis, "Mixed-Integer Programming for QoS-based Web Service Matchmaking", *IEEE Transactions on Services Computing*, vol. 2, no. 2, pp. 122-139, 2009.

[PPA+09] N. Papadakis, **D. Plexousakis**, G. Antoniou, M. Papadakis and K. Boutsika, "A Tool for Addressing the Ramification Problem in Temporal Databases", *International Journal on Artificial Intelligence Tools*, 18 (4), pp. 589-601, 2009.

[KP08d] K. Kritikos and D. Plexousakis, "QoS-based Web Service Discovery Algorithm for Over-Constrained QoS Demands", *International Journal of Web Services Practices*, vol. 3, no. 1-2, pp. 71-82, 2008.

[PB+08] T. Patkos, A. Bikakis, G. Antoniou, M. Papadopouli and **D. Plexousakis** "Design and Challenges of a Semantics-based Framework for Context-Aware Services", *International Journal of Reasoning-Based Intelligent Systems (IJRIS)*, vol. 1, nos. 1/2 , pp. 18-30, 2009.

[FMK+07] G. Flouris, D. Manakanatas, H. Kondylakis, **D. Plexousakis** and G. Antoniou, "Ontology Change: Classification and Survey", in *The Knowledge Engineering Review*, 23 (2), pp. 117-152, 2008.

[TCF+07] Y. Tzitzikas, V. Christophidis, G. Flouris, D. Kotzinos, H. Markkanen, **D. Plexousakis** and N. Spyrtatos, "Emergent Knowledge Artifacts for Supporting Trialogical E-Learning", in the *International Journal of Web-based Learning and Teaching Technologies*, 2 (3), pp. 16-38, July-September 2007.

[PPA06] N. Papadakis, **D. Plexousakis**, and G. Antoniou, "The Ramification Problem in Temporal Databases: Changing Beliefs about the Past", *Journal of Data and Knowledge Engineering*, 59 (2), pp. 397-434, 2006.

- [PP05] M. Papaggelis and **D. Plexousakis**, "Qualitative Analysis of User-based and Item-based Prediction Algorithms for Recommendation Agents", in the *Journal of Engineering Applications of Artificial Intelligence*, 18 (7), pp. 781-789, 2005.
- [MTCP04] A. Maganaraki, V. Tannen, V. Christophides and **D. Plexousakis**, "Viewing the Semantic Web through RVL Lenses", *International Journal of Web Semantics*, 1(4), pp. 359-375, 2004.
- [CP+04] V. Christophides, **D. Plexousakis**, M.Scholl, S. Tourtounis and G. Karvounarakis, "Optimizing Taxonomic Semantic Web Queries using Labeling Schemes", *International Journal of Web Semantics*, 1(2), pp. 207-228, 2004.
- [CK+03] V. Christophides, G. Karvounarakis, A. Maganaraki, **D. Plexousakis** and V. Tannen, "The ICS-FORTH Semantic Web Integration Middleware (SWIM)", *IEEE Data Engineering Bulletin*, 26 (4), pp. 11-18, 2003.
- [PP03] N. Papadakis and **D. Plexousakis**, "Actions with Duration and Constraints: the Ramification Problem in Temporal Databases", *International Journal of AI Tools*, 12 (3), September 2003, Special Issue: Selected Papers from the International Conference on Tools with Artificial Intelligence 2002, pp. 315-353, 2003.
- [KM+03] G. Karvounarakis, A. Maganaraki, S. Alexaki, V. Christophides, **D. Plexousakis**, M. Scholl and K. Tolle, "Querying the Semantic Web with RQL", *Computer Networks Journal*, 42, pp. 617-640, 2003.
- [KP02] M. Koubarakis and **D. Plexousakis**, "A Formal Framework for Business Process Modeling and Design", *Information Systems*, 27, pp. 299-319, 2002.
- [KP99b] M. Koubarakis and **D. Plexousakis**, "Business Process Modeling and Design: A Formal Model and Methodology", *British Telecom Technology Journal*, Special Issue on "The Emerging Enterprise", Vol. 17, no. 4, pp. 23-35, October, 1999 (invited paper, reviewed by special issue editors).
- [MC+96] J. Mylopoulos, V. Chaudhri, **D. Plexousakis**, A. Shrufi and T. Topaloglou, "Building Knowledge Base Management Systems", *The VLDB Journal*, 5(4), pp. 238-263, 1996.
- [Ple93a] **D. Plexousakis**, "Semantical and Ontological Considerations in Telos: a Language for Knowledge Representation", *Computational Intelligence*, 9(1), pp. 41-72, 1993.



## B. CONFERENCE PUBLICATIONS (Full article review)

[**KMP16**] K. Kritikos, K. Magoutis and **D. Plexousakis**, “Towards Knowledge-Based Assisted IaaS Selection”, in Proceedings of the 8<sup>th</sup> IEEE International Conference on Cloud Computing Technology and Science, Luxembourg, December 2016.

[**KP16a**] K. Kritikos and **D. Plexousakis**, “Towards Combined Functional and Non-Functional Semantic Service Discovery”, in Proceedings of the 5<sup>th</sup> European Conference on Service-Oriented and Cloud Computing, Vienna, Austria, September 2016.

[**KP16b**] K. Kritikos and **D. Plexousakis**, “Subsumption Reasoning for QoS-based Service Matchmaking”, in Proceedings of the 5<sup>th</sup> European Conference on Service-Oriented and Cloud Computing, Vienna, Austria, September 2016.

[**MKZP16**] D. Metallidis, K. Kritikos, C. Zeginis and **D. Plexousakis**, “A distributed cross-layer monitoring system based on QoS metrics models”, in Proceedings of the 1<sup>st</sup> Int. Workshop on Performance and Conformance of Workflow Engines (at ESOC 2016), Vienna, Austria, September 2016.

[**AFFP16b**] A. Avgoustaki, G. Flouris, I. Fundulaki and **D. Plexousakis**, “Provenance Management for Evolving RDF Datasets”, in ACM Europe WomENcourage 2016, Linz, Austria, September 2016 (to appear)

[**AFFP16a**] A. Avgoustaki, G. Flouris, I. Fundulaki and **D. Plexousakis**, “Provenance Management for Evolving RDF Datasets”, in ESWC 2016, Heraklion, Greece, May 2016 (to appear)

[**FBPP16**] G. Flouris, A. Bikakis, T. Patkos and **D. Plexousakis**, “Argument Extraction Challenges in a New Web Paradigm”, Dagstuhl Seminar 16161 “Natural Language Argumentation: Mining, Processing and Reasoning over Textual Arguments”, Schloss Dagstuhl, Germany, April 2016

[**KFP16**] H. Kondylakis, A. Fountouris and **D. Plexousakis**, “Efficient Implementation of Joins over Cassandra DBs”, in EDBT 2016 (Poster Proceedings – full review), Bordeaux, France, March 2016 (to appear)

[**TKDP15b**] G. Troullinou, H. Kondylakis, E. Daskalaki and **D. Plexousakis**, “RDF Digest: Ontology Exploration Using Summaries”, Demo paper (full-review) in Proceedings of the 14th International Semantic Web Conference (ISWC), LNCS 9366, Springer, Bethlehem, PA, USA, October 11-15, 2015.

[**PFP+15**] T. Patkos, G. Flouris, P. Papadakos, A. Bikakis, P. Casanovas, J. Gonzalez-Conejero, R. Varela, A. Hunter, G. Idir, G. Ioannidis, M. Kacprzyk-Murawska, A. Nowak, J. Pitt, **D. Plexousakis**, A. Rychwalska and A. Stan, “Privacy-by-Norms: Privacy Expectations in Online Interactions”, in Proceedings of the 3<sup>rd</sup> Int. Workshop on Self-Adaptive and Self-Organizing Socio-Technical Systems (SASO<sup>ST</sup> 2015), September 2015, IEEE.

[**KP15**] K. Kritikos and **D. Plexousakis**, “Multi-Cloud Application Design through Cloud Service Composition”, in Proceedings of the 8<sup>th</sup> IEEE International Conference on Cloud Computing, pp. 686-693, New York, USA, June 2015.

[TKDP15a] G. Troullinou, H. Kondylakis, E. Daskalaki and **D. Plexousakis**, “RDF Digest: Efficient Summarization of RDF/S KBs”, in Proceedings of the 12<sup>th</sup> Extended Semantic Web Conference (ESWC), LNCS 9088, Springer, pp. 119-134, Portoroz, Slovenia, May 2015.

[ZFP+14] D. Zografistou, G. Flouris, T. Patkos, **D. Plexousakis**, M. Baláž, M. Homola and A. Simko, “A dialogical model for collaborative decision making based on compromises”, in Proceedings of the 12<sup>th</sup> European Conference on Multi-Agent Systems, Prague, CZ, December 2014.

[BP14] G. Baryannis and **D. Plexousakis**, “Fluent Calculus-Based Semantic Web Service Composition and Verification using WSSL“, in Proceedings of the 9<sup>th</sup> International Workshop on Semantic Web Enabled Software Engineering (@ ICSOC 2013), Berlin, Germany, December 2013, LNCS 8377, pp. 256-270, 2014.

[PDP14] E. Papadakis, M. Doerr and **D. Plexousakis**, “Fuzzy Times on Space-Time Volumes”, in Proceedings of the 12<sup>th</sup> International Conference on E-Challenges, Belfast, Northern Ireland, October 2014.

[KPH+14b] H. Kondylakis, **D. Plexousakis**, V. Hrgovic, R. Woitsch, M. Premm and M. Schuele, “Personal eHealth Knowledge Spaces through Agents, Models and Semantics”, Demo paper (full-review) in Proceedings of the 33<sup>rd</sup> International Conference on Conceptual Modelling, LNCS 8823, pp. 293-297, Atlanta, GA, October 2014.

[KPH+14a] H. Kondylakis, **D. Plexousakis**, V. Hrgovic, R. Woitsch, M. Premm and M. Schuele, “Agents, Models and Semantic Integration in Support of Personal eHealth Knowledge Spaces”, in Proceedings of the 15<sup>th</sup> International Conference on Web Information Systems Engineering (WISE 2014), LNCS 8786, Springer, pp. 496-511, Thessaloniki, Greece, October 2014.

[ZKP14] C. Zeginis, K. Kritikos and **D. Plexousakis**, “Event Pattern Discovery for Cross-Layer Adaptation of Multi-cloud Applications”, in Proceedings of the 3<sup>rd</sup> European Conference on Service-Oriented and Cloud Computing, pp. 138-147, Manchester, UK, September 2014.

[GFP14b] F. Gouidis, T. Patkos, G. Flouris and **D. Plexousakis**, “A demo for Smart City Operation Center”, in Proceedings of the 8<sup>th</sup> International Web Rule Symposium, Prague, Czech Republic, August 2014.

[GFP14a] F. Gouidis, T. Patkos, G. Flouris and **D. Plexousakis**, “Declarative Reasoning Approaches for Agent Coordination”, in Proceedings of the 8<sup>th</sup> Hellenic Conference on Artificial Intelligence, LNAI, Springer, pp. 489-503, Ioannina, Greece, May 2014.

[SKP13] Skouradaki, M., Kalogiannakis, M., & **Plexousakis, D.** “Enhancing Learning Management Systems (LMS) with the use of Web Technologies”, In A. Lionarakis (Ed.) Proceedings of the 7<sup>th</sup> International Conference in Open and Distance Learning - Learning Methodologies (volume 3, section A), Athens, 8-10 November 2013, pp. 105-118.

[ZKG+13] C. Zeginis, K. Kritikos, P. Garefalakis, K. Konsolaki, K. Magoutis and **D. Plexousakis**, “Towards Cross-Layer Monitoring of Multi-Cloud Service-Based Applications”, in Proceedings of the 2<sup>nd</sup> European Conference on Service-Oriented and Cloud Computing, pp. 188-195, Malaga, Spain, September 2013.

[BGK+13] G. Baryannis, P. Garefalakis, K. Kritikos, K. Magoutis, A. Papaioannou, **D. Plexousakis** and C. Zeginis, “Lifecycle Management of Service-based Applications on Multi-Clouds: A Research Roadmap”, in Proceedings of the 1<sup>st</sup> International Workshop on Multi-cloud Applications and Federated Clouds, pp. 13-20, Prague, CZ, April 2013.

[BP13a] G. Baryannis and **D. Plexousakis**, "WSSL: A Fluent Calculus-based Language for Web Service Specifications", in Proceedings of the 25th International Conference on Advanced Information Systems Engineering, pp. 256-271, June 2013, Valencia, Spain.

[ZKK+12] C. Zeginis, K. Konsolaki, K. Kritikos and **D. Plexousakis**, "Towards Proactive Cross-Layer Service Adaptation", in Proceedings of the 13<sup>th</sup> International Conference on Web Information System Engineering, LNCS 7651, pp. 704-711, November 2012, Paphos, Cyprus.

[PCP+12] T. Patkos, A. Chibani, **D. Plexousakis** and Y. Amirat, "A Production Rule-Based Framework for Causal and Epistemic Reasoning", in Proceedings of the 6<sup>th</sup> International Symposium on Rules (RuleML'12), pp. 120-135, August 2012, Montpellier, France (*best paper award*).

[KP12c] H. Kondylakis and **D. Plexousakis**, "Ontology Evolution: Assisting Query Migration", in Proceedings of the 31<sup>st</sup> International Conference on Conceptual Modeling (ER 2012), pp. 331-344, October 2012, Florence, Italy.

[KP12b] K. Kritikos and **D. Plexousakis**, "Towards Optimal and Scalable Non-Functional Service Matchmaking Techniques", in Proceedings of ICWS 2012, pp. 327-335, June 2012, Hawaii, USA.

[DP12] E. Daskalaki and **D. Plexousakis**, "OtO Matching System: A multi-strategy approach to Instance Matching", in Proceedings of the 24<sup>th</sup> International Conference on Advanced Information Systems Engineering, LNCS 7328, pp.286-300, June 2012, Gdansk, Poland.

[BCP12] G. Baryannis, M. Carro and **D. Plexousakis**, "Deriving Specifications for Composite Web Services", in Proceedings of COMPSAC 2012, pp. 432-437, July 2012, Izmir, Turkey.

[KP12a] K. Kritikos and **D. Plexousakis**, "Towards Optimizing the Non-Functional Service Matchmaking Time", in WWW 2012 Poster Proceedings, WWW2012 Companion, pp. 549-550, April 2012, Lyon, France.

[ZKK+11] C. Zeginis, K. Konsolaki, K. Kritikos and **D. Plexousakis**, "ECMAF: An Event-Based Cross-Layer Service Monitoring and Adaptation Framework", in Proceedings of the 5<sup>th</sup> International Workshop on Non-functional Properties and Service-Level Management in Service-Oriented Computing (at ICSOC-2011), pp. 147-161, December 2011, Paphos, Cyprus.

[KP11b] H. Kondylakis and **D. Plexousakis**, "Ontology Evolution in Data Integration: Query Rewriting to the Rescue", in Proceedings of the 30<sup>th</sup> International Conference on Conceptual Modeling (ER 2011), pp. 393-401, October 2011, Brussels, Belgium.

[KP11a] H. Kondylakis and **D. Plexousakis**, "Exelixis: Evolving Ontology-Based Data Integration System", ACM SIGMOD Int. Conference on Management of Data, June, 2011, Athens, Greece, pp. 1283-1286.

[PP11] T. Patkos and **D. Plexousakis** "Epistemic Reasoning for Ambient Intelligence" in Proceedings of the 3<sup>rd</sup> International Conference on Agents and Artificial Intelligence, pp. 242-248, Rome, Italy, January 2011.

[BP10] George Baryannis and **D. Plexousakis**, "Towards Realizing Dynamic QoS-aware Web Service Composition", in Proceedings of the PhD Symposium, 8<sup>th</sup> IEEE European Conference on Web Services, pp. 33-36, Cyprus, December 2010.

[ZP10] C. Zeginis and **D. Plexousakis**, "Towards Realizing WS cross-layer monitoring and adaptation", in Proceedings of the PhD Symposium, 8<sup>th</sup> IEEE European Conference on Web Services, Cyprus, December 2010.

[KPT10c] H. Kondylakis, **D. Plexousakis** and Y. Tzitzikas, "Ontology Evolution in Data Integration", in Proceedings of the International Workshop on Ontology Dynamics, International Semantic Web Conference, November 2010, Shanghai, China, LNCS 6998, pp. 393-401, 2011.

[CCP10] I. Chryssakis, C. Chalkidis, and **D. Plexousakis**, "Evaluation of Top-k Queries in Peer-to-Peer Networks using Threshold Algorithms", in Proceedings of the 19<sup>th</sup> International Conference on Information and Knowledge Management, pp. 1305-1308, Toronto, October 2010.

[KP+10] H. Kondylakis, **D. Plexousakis**, H. Wache, D. Feldkamp, K. Hinkelmann and A. Bergmayr, "Semantic Technology to enable Business and IT alignment", in Proceedings of the EKAW 2010 Workshop on Open Knowledge Models, October 2010, Lisbon, Portugal.

[KPT10a] H. Kondylakis, **D. Plexousakis** and Y. Tzitzikas, "Ontology Evolution in Data Integration", in Poster Proceedings of the Extended Semantic Web Conference, June 2010, Heraklion, Greece.

[KPT10b] H. Kondylakis, **D. Plexousakis** and Y. Tzitzikas, "Ontology Evolution in Data Integration", in Proceedings of the Hellenic Data Management Symposium, June 2010, Ayia Napa, Cyprus.

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## E. TECHNICAL REPORTS

[**FBPP13-TR**] G. Flouris, A. Bikakis, T. Patkos and **D. Plexousakis**, “Globally Interconnecting Persuasive Arguments: The Vision of the Persuasive Web”, TR-438, Institute of Computer Science, Foundation for Research and Technology – Hellas, 2013.

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**[PM96-TR]** **D. Plexousakis** and J. Mylopoulos, "Accommodating Integrity Constraints during Database Design ", *TR-CS-96-17*, Department of Computing and Information Sciences, Kansas State University, 1996 (same as **[PM96]**).

**[Ple96-TR]** **D. Plexousakis**, "On the Efficient Maintenance of Temporal Integrity in Knowledge Bases", *DKBS-TR-96-1*, Data and Knowledge Base Systems Series, Department of Computer Science, University of Toronto, 1996 (same as PhD Thesis).

**[MC+94-TR]** J. Mylopoulos, V. Chaudhri, **D. Plexousakis**, A. Shrufi and T. Topaloglou, "Building Knowledge Base Management Systems: A Progress Report", *DKBS-TR-94-4*, Data and Knowledge Base Systems Series, Department of Computer Science, University of Toronto, 1994.

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## F. OTHER PUBLICATIONS

- [PP11] T. Patkos and **D. Plexousakis**, "DECKT: Epistemic Reasoning for Ambient Intelligence", *ERCIM News* 84, January 2011.
- [AP09] G. Antoniou and **D. Plexousakis**, "Semantic Web", in the *Encyclopedia of Database Systems*, L. Liu, T. Ozsü (eds), Springer Verlag, pp. 2579-2583, 2009.
- [MPS09] F. Martinelli, **D. Plexousakis** and T. Skordas, "Engineering Secure Complex Software Systems and Services", *ERCIM News* 76, January 2009.
- [ΓΚΠ08] Π. Γιανέλος, Δ. Κοτζίνος και **Δ. Πλεξουσάκης**, "Αναμιγνύοντας τα Δικά μας Γεωγραφικά Δεδομένα: Πλατφόρμα Παρουσίασης Γεωγραφικών Δεδομένων πάνω από Google Maps", Πανελλήνιο Συνέδριο HellasGIS, Δεκέμβριος 2008.
- [KP08a] K. Kritikos and **D. Plexousakis**, "QoS-based Web Service Description and Discovery", *ERCIM News*, 72, pp. 43-44, January 2008.
- [ΝΠ07] Χ. Νικολάου και **Δ. Πλεξουσάκης**, "Ο Επιχειρηματικός Μετασχηματισμός στην Παγκόσμια Οικονομία των Υπηρεσιών", *The Economist*, Ελληνική ειδική έκδοση με την Εφημερίδα Καθημερινή, σελ. 34-35, Νοέμβριος 2007.
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- [Ple06] **D. Plexousakis**, "Bits, Atoms and Genes Beyond the Horizon", *ERCIM News*, 64, pp. 7-13, January 2006.
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- [ACP04] G. Antoniou, V. Christophides and **D. Plexousakis**, "The Semantic Web: Key Ideas", in the *Encyclopedia of Artificial Intelligence*, 2004.
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- [KCP01] G. Karvounarakis, V. Christophides and **D. Plexousakis**, "RQL: A Declarative Query Language for RQL", *D-Lib Magazine*, Vol. 7, no. 12, December 2001.
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## G.INVITED TALKS

[EHF14] "Biomedical Data Sharing: the Big Data Challenges", e-Health Forum, Athens, Greece, May 2014.

[PLS13] "Calculi for Reasoning about Knowledge and Action", 9<sup>th</sup> Panhellenic Logic Symposium, Athens, Greece, July 2013.

[OM12] "Development and maintenance of correlated ontologies and their derivative products - experience with CIDOC-CRM for information integration in culture and science", Modeling Methods in Motion, 3rd Interlational Workshop on Open Models, Vienna, Austria, September 2012.

[FF10] "i-lands: Improved Living Environments through Synergies of Ubiquitous, Evolvable & Intelligent Technologies", FET Flagships Science & Technology Forum, Brussels, June 2010.

[RW06] "RDF Querying: Language Constructs and Evaluation Methods Compared", invited lecture at *Reasoning Web Summer School*, Lisbon, Portugal, September, 2006.

[SOFSEM06] "Evolving Ontology Evolution", 32<sup>nd</sup> *International Conference on Current Trends and Practice in Computer Science (SOFSEM 2006)*, Prague, Czech Republic, January 2006.

[PAKM04] "Knowledge Management on the Semantic Web", *International Conference on Practical Aspects of Knowledge Management (PAKM04)*, Vienna, Austria, December 2004.

[SOFSEM04] "Querying and Viewing the Semantic Web", 30<sup>th</sup> *International Conference on Current Trends and Practice in Computer Science (SOFSEM 2004)*, Prague, Czech Republic, January 2004.

[Onassis03] "Semantic Web: Myths and Reality", *Onassis Lecture Series in Computer Science*, Heraklion, Greece, July 2003 (with V. Christophides).

[EU-NSF02] "Querying the Semantic Web", *EU-NSF Workshop on Database and Information Systems Research for Semantic Web and Enterprises*, Amicalola Falls, Georgia, April 3-5, 2002 (not attended).

[PLS01] "Reasoning about Database Dynamics in the Situation Calculus", 3<sup>rd</sup> *Panhellenic Symposium on Logic*, Anogia, Greece, July 2001.

[NCI01] "Thematic Web Portals: the Case of Science and Technology Museums", *Network on Cultural Informatics*, Athens, Greece, June 2001.

[DLW01] "From Digital Libraries to Web Portals", *Digital Libraries Workshop*, University of Crete, May 2001.

## H. TUTORIALS

[PP14] **D. Plexousakis** and T. Patkos, "Modeling Knowledge, Action and Time: Action Theories and their Applications in Dynamic, Uncertain Domains", *Next Generation Enterprise Modeling: Methods, Frameworks, Tools*, Klagenfurt, Austria, July 2014.

[FL+06b] T. Furche, B. Linse, F. Bry, **D. Plexousakis** and G. Gottlob, "RDF Querying: Language Constructs and Evaluation Methods Compared", *Reasoning Web Summer School*, Lisbon, Portugal, September 2006.

[MC+95a] J. Mylopoulos, V. Chaudhri, I. Jurisica, **D. Plexousakis**, A. Shrufi, T. Topaloglou, and Q. Wang, "Information and Knowledge Base Management", Tutorial presented at the *International Joint Conference on Artificial Intelligence (IJCAI'95)*, Montreal, Canada, August 1995.

[MC+95b] J. Mylopoulos, V. Chaudhri, I. Jurisica, **D. Plexousakis**, A. Shrufi, T. Topaloglou, and Q. Wang, "Information and Knowledge Base Management", Tutorial presented at the *Australian Joint Conference on Artificial Intelligence*, Canberra, Australia, 1995.

[MC+94] J. Mylopoulos, V. Chaudhri, I. Jurisica, **D. Plexousakis**, A. Shrufi, T. Topaloglou, and Q. Wang, "Information and Knowledge Base Management", Tutorial presented at the *International Conference on Database and Expert Systems Applications (DEXA'94)*, Athens, Greece, 1994.

[MC+93a] J. Mylopoulos, V. Chaudhri, I. Jurisica, **D. Plexousakis**, A. Shrufi, T. Topaloglou, and Q. Wang, "Information and Knowledge Base Management", Tutorial presented at the *International Conference on Information and Knowledge Management (CIKM'93)*, Washington, DC, 1993.

[MC+93b] J. Mylopoulos, V. Chaudhri, I. Jurisica, **D. Plexousakis**, A. Shrufi, T. Topaloglou, and Q. Wang, "Knowledge Base Management", Tutorial organized by the *Ontario Information Technology Research Center*, for academics, students and practitioners from Ontario Universities and Industries, Toronto, Canada, February 1993.

### Institute of Computer Science, FORTH

- **[CloudSocket]** Business and IT-Cloud Alignment Using a Smart Socket, H2020-ICT-644490, Duration: 01/01/2015 – 31/12/2017, Budget: 268.750,00€ (*Scientific Coordinator FORTH-ICS*)
- **[Forthnet recommendation engine]** An online recommendation system for pay-TV content based on user-preferences and user-history, Private Contract, Duration: October 2016 – April 2017, Budget: 46,000 € (*Scientific Coordinator FORTH-ICS/ISL*)
- **[AI-CARE]** Προηγμένα συστήματα διαχείρισης γνώσης με αξιοποίηση διαδικτυακής τεχνολογίας και εφαρμογές στη φροντίδα υγείας, (Advanced knowledge management systems and applications in healthcare), ΕΣΠΑ 2007-2013, Πρόγραμμα Συνεργασία 2011, Duration: 21/08/2013 – 31/10/2015, Budget: 101.500,00 € (*Member of the Research Team*)
- **[RealEstate2.0]** Καινοτόμες υπηρεσίες Real-Estate: αξιοποιώντας το Web 2.0 (Informed Real-Estate Services: Leveraging Web 2.0), ΕΣΠΑ 2007-2013, Πρόγραμμα Συνεργασία 2011, Duration: 24/05/2013 – 31/10/2015, Budget: 193.000,00 € (*Scientific Coordinator FORTH-ICS*)
- **[eSENS]** Electronic Simple European Network Services, FP7-CIP Large Scale Project-325211, Duration: 01/04/2013 – 31/03/2016, Budget: 360.044,00 € (*Scientific Coordinator FORTH-ICS*)
- **[DIACHRON]** Managing the Evolution and Preservation of the Data Web, FP7-ICT-601043, Duration: 01/04/2013 - 31/03/2016, Budget: 703.740,00 € (*Member of the Research Team*)
- **[PaaSage]** Model Based Cloud Platform Upperware, ICT-FP7-317715, Duration: 01/10/2012 - 30/09/2016, Budget: 506.947,00 € (*Scientific Coordinator FORTH-ICS/ISL*)
- **[eHealthMonitor]** Intelligent Knowledge Platform for Personal Health Monitoring Services, ICT-FP7-287509, Duration: 01/12/2011 - 30/11/2014, Budget: 466.800,00 € (*Scientific Coordinator FORTH-ICS, Project Quality Manager*)
- **[3DSYSTEMEK]** Σύστημα Τεκμηρίωσης - Ανάδειξης - Αξιοποίησης Μνημείων Πολιτιστικής Κληρονομιάς μέσω ολοκληρωμένης Τρισδιάστατης Αποτύπωσης, Μοντελοποίησης και Καταγραφής Μεταδεδομένων (Development of a novel system for 3D Documentation, Promotion and Exploitation of Cultural Heritage Monuments via 3D data acquisition, 3D modeling and metadata recording), ΕΣΠΑ 2007-2013, Πρόγραμμα Συνεργασία 2009, Duration: 18/04/2011 – 17/08/2014, Budget: 151.010,00 € (*Member of the Research Team*)
- **[ΔΕΤΕΠ-ΤΠΕ]** Ανάπτυξη Δικτύου Επιχειρηματικής και Τεχνολογικής Πληροφόρησης, (Development of a Business and Technology Information Network), Επιχειρησιακό Πρόγραμμα Ανάπτυξης Ανθρώπινου Δυναμικού, Duration: 22/02/2011 – 22/02/2015, Total budget: 787.200,00 € (*Scientific Coordinator of the Information and Communication Technologies Task Group*)
- **[Planet Data]** European Network of Excellence on Large-Scale Data Management, ICT-FP7-257641, Duration: 01/10/2010 – 30/09/2014, Budget: 328.592,00 € (*Member of the Research Team*)

- **[plugIT]** Business and IT Alignment using a Model-based Plug-in Framework, ICT-FP7-231430, Duration: 01/03/2009 – 31/08/2011, Προϋπολογισμός: 265.480,00 € (*Scientific Coordinator FORTH / Project Scientific Manager*)
- **[RPIC (ΠΠΚ)]** Broadband Service and Business Transformation , Regional Pole of Innovation of Crete, General Secretariat of Research and Technology, Greek Ministry of Development, Duration: 01/11/2006 – 15/12/2008, Total budget: 300.954,00 € (*Project Scientific Coordinator*)
- **[InterLink]** International Cooperation Activities in Future and Emerging ICTs, Coordination Action, FET Programme, IST-FP6-034051, Duration: 01/10/2006 – 31/03/2009, Budget: 121.400,00 € (*Member of the Scientific Coordination Committee*)
- **[LOCCANDIA]** Lab-on-chip based protein profiling for Cancer diagnosis, FP6-IST-034202, Duration: 01/06/2006 – 31/05/2009, Budget ICS/ISL: 116.940,00 € (*Member of the Research Team*)
- **[KPLab]** Developing Knowledge Practices Laboratory, Integrated Project, IST-FP6-27490, Duration: 01/02/2006 – 31/01/2011, Budget: 939.132 € (*Member of the Research Team*)
- **[ACGT]** Advancing Clinico-Genomic Trials on Cancer: Open Grid Services for Improving Medical Knowledge Discovery, Integrated Project, IST-FP6-026996, Duration: 01/02/2006 – 31/07/2010, Budget: 213.396,00 € (*Scientific Coordinator FORTH-ICS/ISL*)
- **[Research Excellence II]** Development of Ambient Intelligence Environment, Emerging Areas of Excellence in Information and Communication Technologies Programme, General Secretariat of Research and Technology, Greek Ministry of Development, Duration: 01/01/2006 – 30/06/2008, Budget: 41.279,00 € (*Member of the Research Team*)
- **[Beyond-the-Horizon]** Anticipating Future and Emerging Information Society Technologies, Coordination Action, FET Programme, IST-FP6-006622, Duration: 01/01/2005 – 30/06/2006, Budget: 139.000,00 € (*Project Scientific Coordinator*)
- **[REWERSE]** Reasoning on the Web with Rules and Semantics, Network of Excellence, IST-FP6-506779, Duration: 01/03/2004 – 29/02/2008, Budget: 86.479,00 € (*Member of the Research Team*)
- **[Cultural Documentation Standards]** Πρότυπα Πολιτισμικής Τεκμηρίωσης και Τεχνολογίες Υποστήριξης της Διασύνδεσης του Ψηφιακού Πολιτισμικού Αποθέματος και της Διαλειτουργικότητας Συστημάτων, (Standards for cultural documentation and support technologies for the integration of digital cultural repositories and systems interoperability: Studies, Prototypes and Best-practices guides), General Secretariat of Research and Technology, Greek Ministry of Development / Information Society, Duration: 14/02/2004 – 15/03/2005, Budget: 110.000,00 € (*Member of the Research Team*)
- **[DELOS]** Network of Excellence on Digital Libraries, FP6-IST-2002-507618, Duration: 01/01/2004 – 31/12/2007, Budget: 434.400,00 €, (*Member of the Research Team*)
- **[PrognoChip]** Developing and Establishing DNA Microarray Technology in Greece: Identification and Validation of Classification and Prognosis Molecular Markers for Breast Cancer, General Secretariat of Research and Technology, Greek Ministry of Development, Duration: 01/10/2003 – 31/03/2007, FORTH Budget: 202.230,00 € (*Scientific Coordinator FORTH-ICS/ISL*)

- **[DIAVATIS]** An Interactive System for Improving the Promotion of Touristic & Historical Aspects, General Secretariat of Research and Technology, Greek Ministry of Development, Duration: 07/07/2003 – 06/12/2005, Budget: 291.588,00 € (*Member of the Research Team*)
- **[SeLeNe]** Self e-Learning Networks, IST-2001-39045, Duration: 01/11/2002 – 31/01/2004, Budget: 59.000,00 € (*Member of the Research Team*)
- **[Research Excellence I]** Emerging Areas of Excellence in Information and Communication Technologies Programme, General Secretariat of Research and Technology, Greek Ministry of Development, Duration: 01/01/2002 – 31/12/2004, FORTH-ICS Budget: 500.000,00 € (*Scientific Coordinator FORTH-ICS/ISL*)
- **[QuestionHow]** Quality Engineering Solutions via Tools, Information and Outreach for the New Highly-enriched Offerings from W3C: Evolving the Web in Europe, FP5-IST- 2000-28767, Duration: 01/09/2001 – 31/08/2003, ISL Budget: 20.000 € (*Member of the Research Team*)
- **[PLANET]** European Network of Excellence in AI Planning, FP5-IST-2000-29656, Duration: 01/08/2001 – 31/07/2003, Total Budget: 499.882,00 € (*Scientific Coordinator FORTH-ICS*)
- **[OntoWeb]** Network of Excellence on Ontology-based Information Exchange for Knowledge Management and Electronic Commerce, IST-2000-29243, Duration: 01/06/2001 – 31/05/2004, Budget: 51.600,00 € (*Member of the Research Team*)
- **[CYCLADES]** An Open Collaborative Archive Environment, FP5-IST-2000-25456, Duration: 01/02/2001 – 31/07/2003, Budget: 239.478,00 € (*Scientific Coordinator FORTH-ICS*)
- **[MESMUSES]** Metaphors for Science Museums, FP5-IST-2000-26074, Duration: 01/02/2001-31/07/2003, Budget: 304.998,00 € (*Member of the Research Team*)
- **[ARION]** An Advanced Lightweight Architecture for Accessing Scientific Collections, FP5-IST-2000-25289, Duration: 01/01/2001 - 29/02/2004, Total Budget: 2.808.860,00 € (*Member of the Research Team*)
- **[SCHOLNET]** A Digital Library Testbed to Support Networked Scholarly Communities, FP5-IST-1999-20664, Duration: 01/11/2000 - 30/04/2003, Budget: 296.395,00 € (*Member of the Research Team*)
- **[DELOS]** A Network of Excellence in Digital Libraries, FP5-IST-1999-12262, Duration: 01/01/2000 - 31/12/2002, Budget: 434.400,00 € (*Member of the Research Team*)
- **[C-Web]** A Generic Platform Supporting Community Webs, FP5-IST-1999-13479, Duration: 01/01/2000 - 31/12/2000, Budget: 79.200,00 € (*Member of the Research Team*)
- **[ECTourism]** An Electronic Commerce System for the Provision of Tourism Services over Internet, General Secretariat of Research and Technology, Greek Ministry of Development, Duration: 01/06/1999 - 31/03/2001, FORTH-ICS Budget: 358.034,00 € (*Project Scientific Coordinator*),
- **[Interreg]** Telematics Centre, Information Highway linking organizations in Crete, Cyprus and south-eastern Mediterranean : Cultural telematics Applications), Region of Crete / INTERREG II, Duration: 01/01/1998 – 30/06/2001, Budget: 676.200,00€ (*Member of the Research Team*)

## University of Crete

- **[Practical Training IV]** Practical Training Programme for the Students of the Computer Science Department, University of Crete, Greek Ministry of Education – Education and Lifelong Learning Programme, Duration: 2011-2015, Budget: 95.161,00 € (*Scientific Coordinator UOC-CSD*)
- **[EICOS]** Theoretical and Algorithmic Foundations for Personalized Information Ecosystems, Thales Programme, General Secretariat of Research and Technology, Duration: 2012-2015, Total Budget: 521.739,00 € (*Scientific Coordinator UOC-CSD*)
- **[TORPS]** Tele-Ophthalmologic Service for the Preventive Testing of Cortex Pathology based on an Automated Depth Camera, Cooperation Programme 2011, General Secretariat of Research and Technology, Duration: 2012-2015, Budget: 78.000,00 € (*Scientific Coordinator UOC Data Processing Laboratory*)
- **[SUPPORT]** Horizontal Actions Supporting Schools, Educators and Students during the Transition towards a Digital School; New Services for the Panhellenic School Network, Duration: 2011-2015, Budget: 910.968€ (*Scientific Coordinator UOC Data Processing Laboratory*)
- **[OpenCourses]** Open Academic Courses at the University of Crete, Ε.Π. Εκπαίδευση και Δια Βίου Μάθηση, Greek Ministry of Education – Education and Lifelong Learning Programme, Duration: 2011-2015, Budget: 498.385,00 € (*Scientific Coordinator*)
- **[HERON]** Integrated Electronic Services at the University of Crete, Digital Convergence Programme, Duration: 2011-2015, Budget: 252.435,00 € (*Scientific Coordinator*)
- **[UoC Roadmap]** Roadmap for the Administrative Transformation of the University of Crete (*Member of the Research Team*)
- **[S-Cube]** European Network of Excellence, Software Services and Systems Network, FP7-ICT-215483, Duration: 01/12/2007-30/11-2011, Budget: 375.680,00 € (*Member of the Research Team*)
- **[EU-Canada]** EU-Canada Cooperation Programme in Higher Education and Training, Transatlantic Cooperation Programme, European Commission, (*Scientific Coordinator UOC/CSD*)
- **[E-University]** Technical Specification of an Electronic Public Procurement System for the University of Crete, Information Society, (*Scientific Coordinator*)
- **[Municipality of Heraklion]** Telecom and Service Infrastructure Upgrade - Broadband Access Metropolitan Area Network, (*Scientific Coordinator*)
- **[Municipality of Heraklion]** Technical Specifications for the Electronic Administration Services of the Municipality of Heraklion, Information Society, (*Scientific Coordinator*)
- **[Practical Training III]** Practical Training Programme for the Students of the Computer Science Department, University of Crete, Greek Ministry of Education, Duration: 2006-2008, Budget: 49.970,00 € (*Scientific Coordinator*)
- **[Entrepreneurship]** Student Entrepreneurship Programme, Greek Ministry of Education, (*Member of the Research Team*)

- **[Informatics Curriculum Development II]** Support Programme for Informatics Studies at the Computer Science Department of the University of Crete, Greek Ministry of Education, (*Member of the Research Team*)
- **[SETN06]** Organization of the 4<sup>th</sup> Panhellenic Conference on Artificial Intelligence, Co-funding by the University of Crete, (*Member of the Research Team*)
- **[Practical Training II]** Practical Training Programme for the Students of the Computer Science Department, University of Crete, Greek Ministry of Education, Duration: 2001-2005, Budget: 48.130,00 € (*Scientific Coordinator*)
- **[Informatics Curriculum Development I]** Support Programme for Informatics Studies at the Computer Science Department of the University of Crete, Greek Ministry of Education, (*Member of the Research Team*)
- **[Logic Symposium]** Organization of the Panhellenic Logic Symposium, Co-funding by the European Commission and the University of Crete (*Scientific Coordinator*)

### **University of South Florida**

**[USF1]** University of Florida, New Faculty Start-up grant, (\$30,000)

**[USF2]** Research and Creative Scholarship grant, (\$7,500)



## PARTICIPATION IN INTERNATIONAL CONFERENCE PROGRAM COMMITTEES AND JOURNAL EDITORIAL BOARDS

**[ICTERI16]** 12th International Conference on ICT in Education, Research, and Industrial Applications: Integration, Harmonization, and Knowledge Transfer, Kiev, Ukraine, 2016, *Program Committee Co-Chair*

**[JWS]** Journal of Web Semantics, *Database Area Editor*

**[ESWC 12]** Extended Semantic Web Conference, *Ontologies Track co-chair*

**[ESWC 12]** Extended Semantic Web Conference, *Ontologies Track co-chair*

**[IWOD09, IWOD 10]** International Workshop on Ontology Dynamics, 2009 & 2010, *member of the organizing committee*

**[IWOD08]** 2nd International Workshop on Ontology Dynamics, at ISWC-08, October 2008, *Program Committee Co-Chair*

**[HDMS08]** 7<sup>th</sup> Hellenic Data Management Symposium, Heraklion, July 2007, *General Chair*

**[PCI08]** Panhellenic Conference on Informatics, Samos, August 2008, *Program Committee Co-Chair*

**[JWS]** Journal of Web Semantics, *Database Area Editor*

**[DISWeb06]** International Workshop on Data Integration and the Semantic Web, Luxembourg, June 2006, *Workshop Co-Chair*

**[SETN06]** 4<sup>th</sup> Hellenic Conference on Artificial Intelligence, Heraklion, Greece, May 2006, *Conference Vice-Chair*

**[DISWeb05]** International Workshop on Data Integration and the Semantic Web, Porto, Portugal, June 2005, *Workshop Co-Chair*

**[ISWC04]** 3<sup>rd</sup> International Conference on the Semantic Web, Hiroshima, Japan, November 2004, *Program Committee Co-Chair*

**[EDBT04]** 9<sup>th</sup> International Conference on Extending Database Technology, Heraklion, Greece, March 2004, *Executive Committee Chair*

**[ESSW03]** International Workshop on E-Services and the Semantic Web Budapest, Hungary, May 2003, *Workshop Co-Chair*

**[ISWC03]** 2<sup>nd</sup> International Conference on the Semantic Web, Sanibel Island, Florida, October 2003, *Workshops Co-Chair*

**[IWSW00]** 1<sup>st</sup> International Workshop on the Semantic Web, Lisbon, Portugal, September 2000, *Workshop Co-Chair*

**[ETAI]** Electronic Transactions on Artificial Intelligence, *Member of the Editorial Board*

**[PLS01]** 3<sup>rd</sup> Panhellenic Logic Symposium, *Organizing Committee Member*

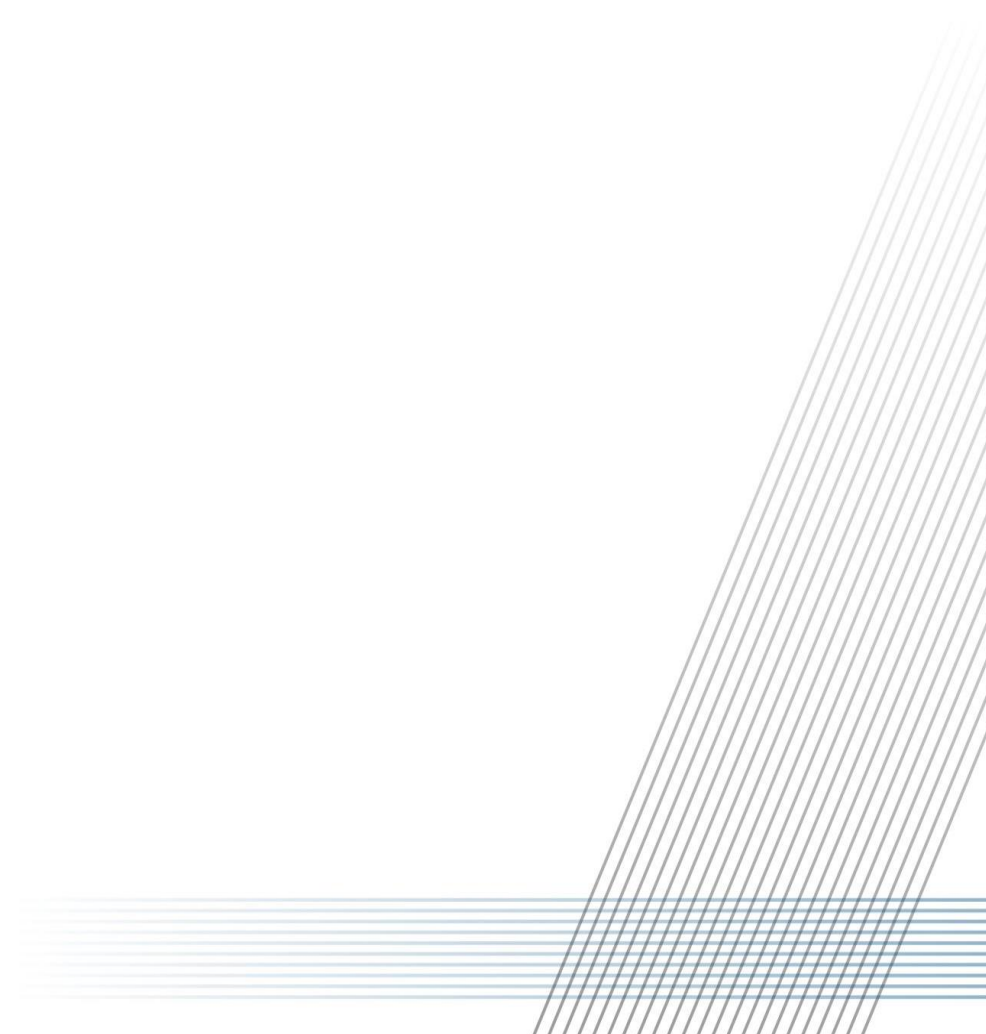


**I participate or have participated as member of the Program Committees of numerous International Conferences and Workshops. A subset of these is listed below using their acronyms only for brevity:**

**2017:** WWW2017, JCDL 2017, ICServ 2017, LWDM 2017  
**2016:** WWW2016, SOFSEM16, SETN 2016, ESWC2016, DIACHRON 2016, JCDL 2016, TPDL 2016, ISWC 2016, ODBASE 2016, COOPIS 2016  
**2015:** SOFSEM 15, ESWC 2015, WWW 2015, CommonSense 2015, JCDL 2015, TPDL2015, ODBASE 2015, DIACHRON 2015  
**2014:** CAISE 2014, ESWC 2014, WISE 2014, ISWC 2014, ODBASE 2014  
**2013:** CAISE 2013, ER 13, ESWC 13, WISE 2013, WISM 2013, ISWC 2013  
**2012:** CAISE 2012, ER 12, ESWC 12, WISE 2012  
**2011:** ESWC 11, ER 11, WISE 2011, SOFSEM 11  
**2010:** ISWC 10, ER-10, EDBT-10, WISE-10, SOFSEM-10  
**2009:** ICDE 09, ER 2009, ECDL 2009, AP2PC 09, EDBT09  
**2008:** WWW08, ESWC 08, ER-08, WISM-08, DBISP2P-08  
**2007:** IJCAI07, WWW07  
**2006:** KR06, ICDE06, SWDB06, CEC06, AP2PC06, WIDM06, ISWC06, DEXA06, CCAI06, SOFSEM06, HDMS06  
**2005:** WWW05, ISWC05, WISE05, ER05, ICSOC05, AP2PC05, SOFSEM05, HDMS05  
**2004:** AAAI04, WWW04, ER04, AP2PC04, ICSOC04, WISE04, SETN04, SAC04, SOFSEM04, WSG04, AIMSA04, SWSWPC04, DBA04, DBISP2P04, HDMS04  
**2003:** WWW03, ICSOC03, DBISP2P03, SWDB03, WISE03, WebDB03, FLAIRS03, DEXA03, AP2PC03, HDMS03, CAISE03  
**2002:** CAISE02, AP2PC02, ISWC02, HDMS02, EuroWeb02, DEXA02, NGITS02, SETN02, FLAIRS02  
**2001:** SWWS01, PLS01, IWSW01  
**2000:** IWSW00

## SERVICE AND COMMITTEE PARTICIPATION

- Head, Information Systems Laboratory, Institute of Computer Science, FORTH (1/2012– to date)
- Chair, Scientific Council, National Documentation Center (2/2014 – to date)
- Chair, UoC Committee on New and Emerging Technologies, (6/2016 – to date)
- Member of the Board of Directors, Science and Technology Park of Greece Management Company (5/2015 – to date)
- Member of the Board of Directors, European Research Consortium on Informatics and Mathematics (ERCIM), Chair of the Science Task Group (2012 – to date); Member of the ERCIM EEIG Executive Committee (in the past)
- Chair, Department of Computer Science, University of Crete. Member of the Senate of the University of Crete (9/2006 – 8/2010)
- Head of the University of Crete Data Processing Laboratory (12/2009 – 12/2013)
- Member of the Graduate Studies Committee, Department of Computer Science, University of Crete (2014-2016)
- Graduate Coordinator and Chair of the Graduate Studies Committee, Department of Computer Science, University of Crete (2003-06)
- Member of the University-wide Graduate Studies Committee, University of Crete (2003-06)
- Chair, ERCIM Working Group on the Semantic Web (11/03 – 10/07)
- Member of the ERCIM Committee of Postdoctoral Fellowships

- Member of the ERCIM Projects Task Group
  - Member of the Library Committee, Institute of Computer Science, FORTH
  - Evaluator of Proposals, ICT Programme FP6, FP7, H2020 (served also as panel rapporteur or vice-chair)
  - Evaluator of Proposals, ERC Advanced Grants
  - Evaluator of Proposals, EPSRC, UK
  - Evaluator of Proposals, Pythagoras Programme for Research Funding, Greek Ministry of Education
  - Reviewer for the academic journals: ACM Transactions on Database Systems, IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on Software Engineering, Computational Intelligence, Applied Intelligence, Journal of Intelligent Information Systems, IEEE Intelligent Systems, Journal of Distributed and Parallel Databases, the Computer Journal, Data and Knowledge Engineering, Information Systems, Journal of Data Semantics, Journal of Web Semantics, IEEE Transactions on Services Computing, ACM Transactions on the Web, Journal of Theory and Practice of Logic Programming, Journal of Web Semantics, Journal of Data Semantics
  - Book proposal evaluator for Morgan-Kaufmann Publishers
  - Proposal evaluator for the Austrian Research Council and the Irish Research Council
  - Member of ACM, IEEE, AAAI
  - Member of the Hellenic Society for Artificial Intelligence
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## STUDENT SUPERVISION

The work reported in the following dissertations and in the most of the MSc theses has been conducted at the Information Systems Laboratory of the Institute of Computer Science (ICS) of the Foundation for Research and Technology - Hellas (FORTH), and has been financially supported by a scholarship provided by FORTH-ICS.

- I. Completed PhD Dissertations:** C. Zeginis (degree conferred November 2014), G. Baryannis (degree conferred November 2014), H. Kondylakis (degree conferred October 2010), T. Patkos (degree conferred October 2010), K. Kritikos (degree conferred October 2008), G. Flouris (degree conferred July 2006), N. Papadakis (degree conferred July 2004)
- II. PhD Dissertations in Progress:** D. Zografistou, A. Dougalis, P. Tziavas, A. Avgoustaki, A. Papaioannou, I. Genitsaridi (co-supervision), K. Varsos
- III. Completed MSc Theses:** W. Cowley, S. Alexaki, P. Doulgeraki, G. Flouris, G. Karvounarakis, K. Kouvaris, N. Papadopoulos, A. Damala, E. Katiniou, V. Lipa, I. Katzagiannaki, A. Tzorbatzaki, A. Maganaraki, S. Tourtounis, R. Kaftaki, N. Dimokas, Th. Patkos, A. Misargopoulos, M. Papaggelis, V. Alevizou, N. Ksantholpoulos, K. Kouriati, K. Athanasaki, D. Manakanatas, H. Kondylakis, I. Roussidis, P. Tziavas, G. Paparis, I. Zikou, I. Chrysakis, T. Kutsuras, E. Nikoloudakis, E. Kritsotakis, D. Velegrakis, C. Zeginis, G. Baryannis, L. Kriara, M. Kalaitzaki, I. Androulakis, I. Tampakis, E. Ranoutsou, G. Linardakis, E. Filipoulou, I. Makrydakis, G. Hatzivasilis, E. Daskalaki, K. Konsolaki, E. Tahmazidis, G. Troulinou, C. Strubulis, H. Tzagarakis, M. Koutraki, D. Zografistou, V. Papakonstantinou, O. Smyrnaki, M. Skouradaki, E. Papadakis, J. Saveta, E. Michael, A. Avgoustaki, I. Diakos, D. Metallidis, K. Dimitraki, I. Ramoutsaki.
- IV. M.Sc Theses in Progress:** F. Gouidis, V. Tzikoulis, E. Ymeralli, A. Pappas, P. Lilitsis, N. Zourbakis, V. Glabedakis, E. Politaki, M. Stratigi, J. Agathangelos
- V. Diploma Theses:** more than 90 diploma theses have been completed under my supervision
- VI. PhD Supervision and Examination Committees:** D. McClurkin, E. Theodorakis, I. Tzitzikas, E. Marazakis, I. Refanidis (Aristotle University of Thessaloniki), D. Toman (Kansas State Univeristy), J. Broekstra (Vrije University Amsterdam), A. Bikakis, P. Papadakis, I. Lillis, P. Raftopoulou, V. Lipa, N. Partarakis, S. Triantafilou, S. Batsakis (Technical University of Crete), P. Papadacos, A. Leonidis, S. Doa, G. Borboudakis, Mohamed Hilia (Univ. Paris Est), A. Skarlatidis (Univ. Piraeus), T. Stavropoulos (Aristotle University of Thessaloniki), V. Efthymiou, M. Skouradaki (Univ. Stuttgart)

## RESEARCH & DEVELOPMENT ACTIVITIES - SYSTEM DESIGN AND DEVELOPMENT

Coordinating ISL activities with the prospect of exploitation. In addition to the internal projects listed below, I have undertaken the initiative of re-engineering several of the processes used in our laboratory for improving the management of contracts, travels, preparation of proposals, web site maintenance and supervising the implementation of supporting information systems.

**[RDF Digest]** A summarization engine for RDF schemas. The system accepts as input large and possibly distributed RDF Schemas and/or Ontologies and produces summaries in the form of directed graphs by taking into account both schema and instance information, using structural and semantic properties and measures such as node centrality and instance weighing (under development).

**[Methinks]** A web-based system for the management of comments submitted by users on websites selling or aggregating goods or services. The system is able to provide users with different views on the comments submitted. Views are generated based on criteria related to the argumentation included in the comments and the strength of opinion expressed. The system has a strong foundation on argumentation theory (under development). Discussions for the commercial exploitation of the developed technology are underway.

**[Sommelier]** A rule-based recommendation system for wines based on food characteristics and user preferences (under development).

**[Herodicus]** An application that can instruct humans to successfully perform physical exercises, by expressing all possible positions and gestures in a logical context (under development).

**[Exelixis]** A data integration system that enables and exploits ontology evolution. The system provides algorithms for rewriting queries among different ontology versions and for producing the set of maximally-contained rewritings for the sources.

**[RDFSuite]** A suite of tools for managing RDF metadata. The architecture comprises: (a) VRP, the first validating RDF parser supporting semantic validation of RDF resource descriptions and schemas, (b) RSSDB, the First RDF Store using schema knowledge to automatically generate an Object-Relational (SQL3) representation of RDF metadata and load resource descriptions, and, (c) RQL, the First Declarative Language for uniformly querying RDF schemas and resource descriptions.

**[CONFIOUS]** A web-based conference management system offering advanced functionality for supporting the reviewing process. Features of the system include: automatic assignment of papers to reviewers using conflict detection, multi-level committees, multiple conference tracks, virtual committee meetings.

**[CYCLADES]** A service mediation middleware architecture for supporting the dynamic user community management and the interoperation of services in the framework of CYCLADES. CYCLADES supports services for collection management, information retrieval, filtering and recommendation, collaborative work over digital archives participating in an open, extensible framework. The mediator service provides for inter-service communication, the addition of services to CYCLADES and maintains user and community information and access rights.

**[PrognoChip Mediator]** The Mediator component of the PrognoChip Integrated Clinico-Genomics Environment (ICGE) enables the integration of the clinical and genomic information subsystems. The biomedical investigator can form clinico-genomic queries through the web-based graphical user interface of the Mediator. This is split into several query forms, allowing cancerous sample selection (along with

their associated gene expression profiles and patient characteristics), based on criteria of interest. After a query is formed, the Mediator translates it into an equivalent set of local sub-queries, which are executed directly against the constituent databases. Then, results are combined for presentation to the user and/or transmission to the Data Mining tools for analysis. The mediator works in conjunction with an automatic schema mapping tool and a query system (QUETE) for distributed sources.

**[SEMPHONIA]** SeMPHoNIA is an architecture for an agent-based marketplace, utilizing knowledge from RDF product repositories, in an open peer-to-peer environment. The platform defines the basic stages of the process of e-trading, facilitating users in closing deals in an automated manner. The implementation of our approach is demonstrated in the context of auction scenarios. The platform is designed to be highly extensible, in order to allow experimentation with the technologies involved.

**[ECTourism]** A middleware architecture for supporting value-added e-commerce services in the context of the ECTourism project. The architecture permits the on-line composition of basic tourism services (such as hotel reservations, ferry-boat reservations, etc.) that are provided by tourism service providers and middle agents and is open and scalable.

## KNOWLEDGE OF FOREIGN LANGUAGES

English, French

## EXTRA-CURRICULAR ACTIVITIES

Contract Bridge

