



UNIVERSITY OF PELOPONNESE
Faculty of Economics, Management, & Informatics
Dept. of Informatics & Telecommunications

Paraskevi Raftopoulou
Research & Teaching Staff

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CURRICULUM VITAE

I. PERSONAL DETAILS

Ia. Contact information

Address: Department of Informatics and Telecommunications
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University Campus, Karaiskaki str., Tripoli, GR-22100

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Ib. Research interests

- Distributed systems
 - (self-organising) distributed social networks
 - complex adaptive systems
 - peer-to-peer, grid, & cloud computing
 - multi-agent systems
- Data/Information management
 - information retrieval & filtering
 - semantic information management
- Digital libraries
 - architectures
 - content retrieval & publish/subscribe
- Databases
 - distributed databases
 - data models/query languages

Ic. Language skills

- Greek: fluently (native language)

- English: fluently (First Certificate in English)
- French: fluently (Diplôme d' Études Françaises 2^e Degré de Sorbonne - option Littérature, Delf 2^e Degré)

II. EDUCATION

- December 2009: Ph.D. from the Department of Electronic and Computer Engineering, Technical University of Crete, Greece
 Thesis Title: *Rewiring Peer Connections over Semantic Overlay Networks*
 Supervisor: Prof. Euripides Petrakis (petrakis@intelligence.tuc.gr)
 Members of my doctoral committee: Prof. Stavros Christodoulakis, Assist. Prof. Vasilis Samoladas
- June 2003: M.Eng. from the Department of Electronic and Computer Engineering, Technical University of Crete, Greece
 Thesis Title: *Fair Resource Allocation in P2P Systems: Theoretical and Experimental Results*
 Supervisor: Prof. Manolis Koubarakis (koubarak@di.uoa.gr).
 Members of my doctoral committee: Prof. Stavros Christodoulakis, Prof. Euripides Petrakis
- October 2000: B.Sc. with GPA 7.82 out of 10 from the Computer Science Department, University of Crete, Greece
 Thesis Title: *Design and Implementation of a Project Management System using Relational Databases*
 Supervisor: Prof. Dimitris Plexousakis (dp@ics.forth.gr)

III. EMPLOYMENT & RESEARCH EXPERIENCE

IIIa. Employment

- July 2013 - present
 Research staff at the Department of Informatics and Telecommunications, University of Peloponnese, Greece
 Member of the Software and Database Systems Laboratory, University of Peloponnese, Greece
 Director: Assoc. Prof. Spiros Skiadopoulos (spiros@uop.gr)
- October 2014 - December 2014
 Remote evaluator for FET-Open ICT Research Proposals submitted in response to the H2020-2014/2015 call
- August 2008 - June 2013
 Research staff at the Department of Computer Science and Technology, University of Peloponnese, Greece
 Member of the Software and Database Systems Laboratory, University of Peloponnese, Greece
 Director: Assoc. Prof. Spiros Skiadopoulos (spiros@uop.gr)
- July 2011 - May 2013
 Remote evaluator for FET-Open ICT Research Proposals submitted in response to the FP7 call

- June 2011 Expert Evaluator for FET-Open ICT Research Proposals submitted in response to the FP7 call at the European Commission, Brussels, Belgium
- October 2007 - July 2008 Visiting researcher at the Databases and Information Systems Department, Max-Planck Institute for Informatics
Director: Prof. Gerhard Weikum (weikum@mpi-inf.mpg.de)
- June 2000 - July 2008 Research assistant at the Intelligent Systems Laboratory, Technical University of Crete, Greece
Director: Prof. Euripides Petrakis (petrakis@intelligence.tuc.gr)
- January 2007 - August 2007 Seminars to the instructors of the program "*Diktiothite*" and preparation of educational material for the same program
More information about the program is available at: www.go-online.gr
- June 2004 Preparation of educational material and participation at the 3rd Multi-Mine Seminar Series with title "*Knowledge Extraction with Emphasis in Medical Applications*"
More information about the program is available at: www.multimine.gr
- December 1999 - June 2000 Design and implementation of database applications for Istos Ltd., Heraklion, Crete

IIIb. Participation in projects

- October 2013 - present Participation in project "Quality Assurance Unit of the University of Peloponnese" funded by the Ministry of Education, Operational Programme for Education and Initial Vocational Training, Greece.
More information about the project is available at: www.espa.gr
- April 2009 - September 2009 Research assistant in project "*Intelligent Systems Laboratory*" funded by the Technical University of Crete, Greece. One of its main objectives was the development of peer-to-peer algorithms and systems
- November 2002 - November 2006 Principal investigator (together with Ass. Prof. Euripides Petrakis) in the project "*Heraclitus*" funded by the Greek Ministry of Education
More information about the project is available at: www.epeaek.gr
- June 2006 - September 2006 Research assistant in project EVERGROW – "*ever-growing, global, scale-free networks, their provisioning, repair and unique functions*" (EU 6th Framework Programme IST/FET)
More information about the project is available at: www.evergrow.org
- March 2004 - Research assistant in project *BIOPATTERN* (EU 6th Framework

December 2005 Programme IST/FET)
More information about the project is available at:
www.biopattern.org

July 2000 - June 2003 Research assistant in project DIET - *“Decentralised Information Ecosystem Technologies”* (EU 5th Framework Programme IST/FET)
More information about the project is available at:
<http://www.dfki.uni-kl.de/DIET/public/index.html>

IV. TEACHING

IVa. Courses

Databases Postgraduate course taught in 2011 at the Department of Computer Science and Technology, University of Peloponnese, Greece

Introduction to Computer Science 1st year graduate course taught in 2011 at the Department of Economic Science, University of Peloponnese, Greece

IVb. Lab courses

Programming II - C 1st year graduate course taught in 2009-2013 & 2015 at the Department of Informatics and Telecommunications, University of Peloponnese, Greece

Information Retrieval 3rd year graduate course taught in 2010-2013 at the Department of Computer Science and Technology, University of Peloponnese, Greece

Object-oriented programming - Java 2nd year graduate course taught in 2008-2012 at the Department of Computer Science and Technology, University of Peloponnese, Greece

Databases 3rd year graduate course taught in 2008-2012 at the Department of Computer Science and Technology, University of Peloponnese, Greece

Artificial intelligence 3rd year graduate course taught in 2009-2010 at the Department of Computer Science and Technology, University of Peloponnese, Greece

Data management systems 4th year graduate course taught in 2009-2010 at the Department of Computer Science and Technology, University of Peloponnese, Greece

Internet services 3rd year graduate course taught in 2009 at the Department of Computer Science and Technology, University of Peloponnese, Greece

IVc. Teaching assistantships

Teaching assistant at the Department of Electronic and Computer Engineering, Technical University of Crete, Greece, in the following courses:

- Data structures (spring 2004, 2005, 2006 & 2007)
- Theory of Computation (autumn 2005 & 2006)
- Multimedia management (autumn 2003 & 2004)
- Theory of programming languages (spring 2003)
- Artificial intelligence (spring 2001 & 2002, autumn 2002)
- Compilers (autumn 2000 & 2001)

V. PUBLICATIONS

Va. Publications in journals and magazines

1. Christos Tryfonopoulos, Stratos Idreos, Manolis Koubarakis, and Paraskevi Raftopoulou. Distributed Large-Scale Information Filtering. *LNCS Transactions on Large-Scale Data- and Knowledge-Centered Systems (TLDKS)*, Springer, 13(91-122), 2014.
2. Paraskevi Raftopoulou, Euripides G.M. Petrakis, and Christos Tryfonopoulos. Rewiring Strategies for Semantic Overlay Networks. *Distributed and Parallel Databases (APD)*, 26(2-3), 181-205, December 2009.
3. Euripides Petrakis, Giannis Varelas, Angelos Hliaoutakis, and Paraskevi Raftopoulou. X-Similarity: Computing Semantic Similarity between Concepts from Different Ontologies. *Journal of Digital Information Management (JDIM)*, December 2006.
4. Paraskevi Raftopoulou, Manolis Koubarakis, Kostas Stergiou, and Peter Triantafillou. Fair Resource Allocation in a Simple Multi-Agent Setting: Search Algorithms and Experimental Evaluation. *International Journal on Artificial Intelligence Tools (IJAIT)*, 14(6), December 2005.

Vb. Publications in conferences

1. Paraskevi Raftopoulou, Christos Tryfonopoulos, Euripides G.M. Petrakis, and Nikos Zevlis. DS4: Introducing Semantic Friendship in Distributed Social Networks. In *Proceedings of the 21st International Conference on Cooperative Information Systems (CoopIS)*, Graz, Austria, September 2013.
2. Dionisis Kontominas, Paraskevi Raftopoulou, Christos Tryfonopoulos, and Euripides G.M. Petrakis. DS4: A Distributed Social and Semantic Search System. In *Proceedings of the 35th European Conference on Information Retrieval (ECIR)*, Moscow, Russia, 24-27 March 2013. (Demo paper)
3. Paraskevi Raftopoulou and Euripides Petrakis. Peer Rewiring in Semantic Overlay Networks. In *Proceedings of the 18th International Conference on Cooperative Information Systems (CoopIS)*, Crete, Greece, 27-19 October 2010.
4. Paraskevi Raftopoulou, Euripides Petrakis, Christos Tryfonopoulos, and Gerhard Weikum. Information Retrieval and Filtering over Self-Organising Digital Libraries. In *Proceedings of the 12th European Conference on Research and Advanced Technology for Digital Libraries (ECDL)*, Aarhus, Denmark, 14-19 September 2008.

5. Paraskevi Raftopoulou and Euripides Petrakis. iCluster: a Self-Organizing Overlay Network for P2P Information Retrieval. In *Proceedings of 30th European Conference on Information Retrieval (ECIR)*, 30 March - 3 April, Glasgow, Scotland, 2008.
6. Manolis Koubarakis, Theodoros Koutris, Christos Tryfonopoulos, and Paraskevi Raftopoulou. Information Alert in Distributed Digital Libraries: The Models, Languages, and Architecture of DIAS. In *Proceedings of the 6th European Conference on Research and Advanced Technology for Digital Libraries (ECDL)*, pages 527-542, Rome, Italy, September 2002.

Vc. Publications in workshops

1. Paraskevi Raftopoulou and Euripides Petrakis. A Measure for Cluster Cohesion in Semantic Overlay Networks. In *Proceedings of the 6th International Workshop on Large-Scale Distributed Systems for Information Retrieval (LSDS-IR)*, Napa Valley, California, October 2008.
2. Euripides Petrakis, Giannis Varelas, Angelos Hliaoutakis, and Paraskevi Raftopoulou. Design and Evaluation of Semantic Similarity Measures for Concepts Stemming from the Same or Different Ontologies. In *Proceedings of the 4th Workshop on Multimedia Semantics (WMS)*, Chania, Crete, Greece, 19-21 June 2006.
3. Giannis Varelas, Epimenides Voutsakis, Paraskevi Raftopoulou, Euripides Petrakis, and Evangelos Miliotis. Semantic Similarity Methods in WordNet and their Application to Information Retrieval on the Web. In *Proceedings of the 7th ACM International Workshop on Web Information and Data Management (WIDM)*, 5 November, Bremen, Germany, 2005.
4. Manolis Koubarakis, Christos Tryfonopoulos, Paraskevi Raftopoulou, and Theodoros Koutris. Data Models and Languages for Agent-Based Textual Information Dissemination. In *Proceedings of the 6th International Workshop on Cooperative Information Agents (CIA)*, volume 2446 of Lecture Notes in Artificial Intelligence, pages 179-193, Madrid, Spain, September 2002. Springer.
5. P. Marrow, M. Koubarakis, R.H. van Lengen, F. Valverde-Albacete, E. Bonsma, J. Cid-Suerio, A.R. Figueiras-Vidal, A. Gallardo-Antolin, C. Hoile, T. Koutris, H. Molina-Bulla, A. Navia-Vazquez, P. Raftopoulou, N. Skarmeas, C. Tryfonopoulos, F. Wang, and C. Xiruhaki. Agents in Decentralised Information Ecosystems: The DIET Approach. In *Proceedings of the Symposium on Information Agents for E-Commerce*, AISB Convention, York, UK, March 2001.

Vd. Publications in national venues

1. Manolis Koubarakis, Theodoros Koutris, Paraskevi Raftopoulou, and Christos Tryfonopoulos. Efficient Agent-Based Dissemination of Textual Information. In *Proceedings of the 2nd Hellenic Conference on Artificial Intelligence (SETN)*, Thessaloniki, Greece, April 2002.

Ve. Theses and technical reports

1. Paraskevi Raftopoulou. Rewiring Peer Connections over Semantic Overlay Networks. Ph.D. Thesis at the Department of Electronic and Computer Engineering, Technical University of Crete, Greece, December 2009.
2. Paraskevi Raftopoulou and Euripides Petrakis. Semantic Similarity Measures: A Comparison Study. Technical Univ. of Crete (TUC), Dept. of Electronic and Computer Engineering, Chania, Crete, Greece. (Technical Report TR-TUC-ISL-04-2005)
3. Paraskevi Raftopoulou. Fair Resource Allocation in P2P Systems: Theoretical and Experimental Results. MSc thesis, Department of Electronic and Computer Engineering, Technical University of Crete, Greece, June 2003.
4. Paraskevi Raftopoulou. Design and Implementation of a Project Management System using Relational Databases. Diploma thesis, Department of Computer Science, University of Crete, Greece, 2000.

VI. SCIENTIFIC CONTRIBUTION

VIa. Citations to my work

The papers presented in Section V are cited by **more than 500 works** (self-citations are not included) presented at international journals and magazines, conferences, workshops, technical reports and theses, including venues like ACM TOIT, TKDE, ACM Sigmod Record, Computer Networks, WWW, WISE, JCDL, etc. Some of the citations are referred below. The full citation list is available upon request.

VIb. Scholarships

- October 2007 - December 2007. Research Scholarship for visiting an international research institute given by the Technical University of Crete, Greece.
- November 2002 - November 2006. Postgraduate Research Scholarship for pursuing a Ph.D. given by the Greek Ministry of Education.

VIc. Program committee memberships and external reviewer

- 4th International Conference on Analysis of Images, Social Networks, and Texts (AIST), 2015
- Special Issue of the Journal of Web Semantics on Ontology-Based Data Access (JWS), 2014
- Computer Networks Journal, Special Issue on Collaborative P2P Technology, 2010
- 33rd Annual ACM SIGIR Conference, 2010)
- 33rd Annual ACM SIGIR Conference, Poster Track, 2010
- 21st International Conference on Database and Expert Systems Applications (DEXA), 2010

- 6th European Semantic Web Conference (ESWC), 2009
- 1st International Conference on Advances in P2P Systems (AP2PS), 2009
- 20th International Conference on Database and Expert Systems Applications (DEXA), 2009
- 5th European Semantic Web Conference (ESWC) 2008
- Efficiency Issues in Information Retrieval Workshop (EIIR), 2008
- 7th Hellenic Data Management Symposium (HDMS), 2008
- 4th European Semantic Web Conference (ESWC), 2007
- 6th International Semantic Web Conference (ISWC), 2007
- 2nd Asian Semantic Web Conference (ASWC' 07)
- 18th IEEE International Conference on Tools with Artificial Intelligence (ICTAI), 2007

VII. OTHER ACADEMIC ACTIVITIES

VIIa. Student supervision

- Nikos Zevlis, (BSc), completed in 2013. Thesis title: "Interest-Based User Clustering in Distributed Social Networks". Thesis was conducted at the University of Peloponnese and was co-supervised with Ass. Professor Christos Tryfonopoulos.
- Dionisis Kontominas, (BSc), completed in 2013. Thesis title: "Implementation of a Semantic Overlay Network for Distributed Data Management". Thesis was conducted at the University of Peloponnese and was co-supervised with Ass. Professor Christos Tryfonopoulos.

VIIb. Presentations

I have presented papers, demos and posters at international conferences and workshops, including leading venues in the areas of information retrieval, databases and digital libraries. I have also presented work conducted in the context of European projects both at project reviews and technical meetings. Below I list some indicational talks:

- March 2013. DS4: A Distributed Social and Semantic Search System (demo), presented at the 35th European Conference on Information Retrieval, Moscow, Russia.
- October 2010. Peer Rewiring in Semantic Overlay Networks, presented at the 18th International Conference on Cooperative Information Systems, Crete, Greece.
- September 2008. Information Retrieval and Filtering over Self-Organising Digital Libraries, presented at the 12th European Conference on Digital Libraries, Arhus, Denmark.
- December 2007. iCluster: a Self-Organizing Overlay Network for P2P Information Retrieval, presented at the 30th European Conference on Information Retrieval, Glasgow, Scotland.

- December 2007. Rewiring Strategies for Efficient IR over Semantic Overlays, presented at the Databases and Information Systems group, Max-Planck-Institut fur Informatik, Germany.
- June 2007. iCluster: a Self-Organising Overlay Network for P2P Information Retrieval, presented at the Databases and Information Systems group, Max-Planck-Institut fur Informatik, Germany.
- September 2005. Knowledge Sharing in Multi-Layer P2P Networks, presented at the STEP 2005 workshop on Net-Centric Computing (NCC'05), Hungary.
- April 2002. Agents in Biomedical Applications, presented at the department of Medicine, University of Crete, Greece.

VIIc. Seminars attended

- June 2004. Multi-Mine Seminar Series, *“Knowledge Extraction with Emphasis in Medical Applications”*. Organiser: Technical University of Crete, Greece.
- July 2002. *“The Data Avalanche: Reducing Information Overload”*. Organiser: Onassis Foundation and FORTH. Speakers: J. Gray, P. Konstantopoulos, S. Orphanoudakis, T. Sellis, D. Tschritzis
- July 2000. *“Planning the Motion of Robots and Molecules: An Algorithmic Introduction”*. Organiser: University of Crete and FORTH. Speaker: L. Kavraki

VIII. OTHER PERSONAL DETAILS

Date of birth:	August 26, 1978
Place of birth:	Tripoli, Greece
Nationality:	Greek
Marital status:	Married
Interests:	Dancing, writing, traveling, sports (tennis, skiing)