CURRICULUM VITAE

Phivos Mylonas

January 2016

SHORT CURRICULUM VITAE

Dr. Phivos Mylonas was born in Athens in 1978. He received his Diploma in Electrical and Computer Engineering from the National Technical University of Athens (NTUA) in 2001, his Master of Science (M.Sc.) in Advanced Information Systems from the National & Kapodestrian University of Athens (UoA) in 2003 and earned his Ph.D. degree (with distinction) at the former University (NTUA) in 2008. He is currently an **Assistant Professor** by the Department of Informatics of the Ionian University, Greece and collaborates as a **Senior Researcher** with the Image, Video and Multimedia Laboratory, School of Electrical and Computer Engineering, Department of Computer Science of the National Technical University of Athens, Greece.

His research interests include content-based information retrieval, visual context representation and analysis, knowledge-assisted multimedia analysis, issues related to multimedia personalization, user adaptation, user modeling and profiling. He has published articles in **15** international journals and **21** book chapters, he is the author of **63** papers in international conferences and workshops, he has edited **10** books and is a guest editor of **8** international journals, he is a reviewer for **25** international journals and has been actively involved in the organization of **68** international conferences and workshops. He is a member of the Technical Chamber of Greece since 2001, a member of the Hellenic Association of Mechanical & Electrical Engineers since 2002 and a member of W3C since 2009, whereas he is a past member of IEEE (1999-2010) and ACM (2001-2010).

CONTACT DETAILS

E-mails	fmylonas@image.ntua.gr / fmylonas@cs.ntua.gr / fmylonas@ionio.gr
Web	http://image.ntua.gr/~fmylonas / http://bit.ly/1a5KgBG

EDUCATION – DISTINCTIONS

2003 - 2008	Ph.D. in Engineering, School of Electrical and Computer Engineering, N.T.U.A. Thesis: "Adaptive Multimedia Content Access based on Context and User Profiles"
2006	Thomaidio Grant for the Science and Art Progress, N.T.U.A.
2005	Thomaidio Grant for the Science and Art Progress, N.T.U.A.
2005	Short Term Research Grant, I.C.C.S.-N.T.U.A.
2001 - 2003	Master of Science in Advanced Information Systems, U.O.A.
1996 - 2001	Diploma in Electrical and Computer Engineering, School of Electrical and Computer Engineering, N.T.U.A.
1989 - 1995	Deutsche Schule Athen, Greek & German Abitur

LANGUAGES

English	Certificate of Proficiency in English, *University of Michigan*
German	Grosses Sprachdiplom, *Deutsche Schule Athen*

SCIENTIFIC MEMBERSHIPS

2009 - …	Member of W3C Social Web Incubator Group [Social Web XG]
2002 - …	Member of Hellenic Association of Mechanical & Electrical Engineers [H.A.M.E.E.]
2001 - …	Member of Technical Chamber of Greece [TEE]
2001 - 2010	Member of Association of Computing Machinery [ACM]
1999 - 2010	Member of Institute of Electrical and Electronic Engineers [IEEE]

RESEARCH & DEVELOPMENT PROJECTS

2014 - 2015	ETCP Greece - Italy 2007 - 2013: **BIG** - Improving governance, management and sustainability of rural and coastal protected areas and contributing to the implementation of the Natura 2000 provisions in IT and GR
2013 - 2016	Adriatic IPA Cross Border Cooperation 2007 - 2013: **PACiNNO**, Platform for trans-Academic Cooperation in Innovation
2013 - 2015	**DARIAH-EU** - DARIAH-GR: DARIAH-GR, Developing a Greek Research Infrastructure for the Humanities
2013	EBF - Specific Actions 2011: **D.I.OP.T.ER**, Design, Development and Evaluation of a Pilot River Border Automatic Surveillance System
2012 - 2013	EBF - **Research Study**, Research Study on the Creation of an Integrated Border Surveillance System
2012 - …	FP7-317947: **Social & Smart**, Social housekeeping through intercommunicating appliances and shared recipes merged in a pervasive web-services infrastructure
2011 - 2013	**P437** - Digital Educational Platform Specifications, Development and Operation of a Digital Knowledge Base, Digital Modulation and Technical Meta-annotation of Educational Material, Infrastructure for Exemplary Teaching and Utilization of Collaborative Web
2011	EBF - Specific Actions 2009: **SI.D.E.T.R.A.C.**, Design, Development and Evaluation of an Integrated Automatic Land Border Surveillance System
2008 - 2011	FP7-215453: **WeKnowIt**, Emerging, Collective Intelligence for personal, organisational & social use
2006 - 2009	FP6-027685: **MESH**, Multimedia Semantic Syndication for Enhanced News Services.
2007	FP6-034549: **agent-DYSL**, Accommodative Intelligent Educational Environments for Dyslexic Learners
2006 - 2008	**COST292**, Semantic Multimodal Analysis of Digital Media
2004 - 2007	ΕΠΑΝ-03ΔΣΒΕΠΡΟ-44: **VisualAsset**, Σύστημα Ανάλυσης, Εξαγωγής Πληροφορίας και Διαχείρισης Πολυμεσικών Εγγράφων
2004 - 2007	FP6-001765: **aceMedia**, Integrating Knowledge, Semantics and Content for User-Centered Intelligent Media Services.
2003 - 2004	**SPERO**, TeleInformatics System for Continuous Collection, Processing, Diffusion of Material for Teacher Training in Special Education, Leonardo Framework
2001 - 2003	IST-1999-20502: **FAETHON**, Unified Intelligent Access to Heterogeneous Audiovisual Content
2002	IST **ERMIS** project, Emotionally Rich Man-machine Intelligent System
2001 - 2002	**SYN-96** project, SYN-96: Development of a Video on Demand system, using the mpeg-2 standard, Research and Technology Operational Program II, ICCS-NTUA, INFOLAB LTD
2001	Project WIN at **NRSC "Democritus"**: http://www.wirelessinternet.gr

REVIEWER OF RESEARCH & DEVELOPMENT PROJECTS

2014 - 2015 **Greek Ministry of Education & Religious Affairs**

Certification of interim physical progress of the project "Interactive and adaptive e-learning based on innovative user modeling", of the National Action "Supporting employment of research staff in enterprises", **Evaluator**

2014 - 2015 **Greek Ministry of Education & Religious Affairs**

Certification of interim physical progress of the project "(LODGOV) Data Governance in the era of the Web of Data: generate, manage, preserve, share and protect resources in the Web of Data (315)", of the National Action "Aristeia", **Evaluator**

2013 - 2014 **Greek Ministry of Education & Religious Affairs**

Certification of interim physical progress of the project "FutureNET, PE7 (3204)", of the National Action "Post-doc researchers support", **Evaluator**

2013 **Greek Ministry of Education & Religious Affairs**

Certification of interim physical and financial progress of the project of the act "Support Groups of SMEs for Research & Technological Development of the National Action "Strengthening new and small businesses", **Evaluation Team Member**

2013 **Information Society S.A.**

2nd stage Evaluator of seven (7) works of the Action "Strengthening Business for investment projects-development of innovative products and value added services (ICT4Growth)»

2012 - 2013 **Greek State Scholarship Foundation**

Program Bursary Scholarships for period 2012-2013, **National Evaluator**

2012 **American School of Classical Studies at Athens**

Member of the Steering Committee of the project: "Reviving the ancient market, the place where democracy was born, Digitizing collections of Ancient Agora A.S.K.S.A."

2012 **Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), National Research Council, Romania**

External Evaluator (**External Referee**) for the National Research Council of Romania

PROFESSIONAL EXPERTISE

2013 - …	Ionian University, Department of Informatics, Assistant Professor
2013	University of Central Greece, Department of Computer Science, Adjunct Professor (GPD 407/80)
2013	Ionian University, Department of Informatics, Lecturer (GPD 407/80)
2013	ICCS-NTUA, Senior Researcher
2012	University of Central Greece, Department of Computer Science, Adjunct Professor (GPD 407/80)
2012	University of the Aegean, School of Management, Department of Financial and Management Engineering, Adjunct Professor (GPD 407/80)
2011 - 2012	E.A.I.T.Y., Senior Researcher
2011	ICCS-NTUA, Senior Researcher
2011	University of Central Greece, Department of Computer Science, Adjunct Professor (GPD 407/80)
2011	University of Crete, Department of Computer Science, Adjunct Professor (GPD 407/80)
2010 - 2011	Technological Educational Institute (T.E.I.) of Chalkis, General Department of Applied Sciences, Visiting Lecturer & Laboratory Teaching Associate
2010	University of the Aegean, School of Management, Department of Financial and Management Engineering, Adjunct Professor (GPD 407/80)
2008 - 2011	EU-IST WeKnowIt project: "Emerging, Collective Intelligence for personal, organisational and social use", Project Manager
2007 - 2008	Technical Chamber of Greece (TEE), Protocol Number TEE 5951/21.02.2008, Protocol Number TEE 1812/22.1.2008, Protocol Number TEE 18340/20.6.2007, Case Expert
2007 - 2009	EU-IST MESH project: "Multimedia Semantic Syndication for Enhanced News Services", Project Manager
2007	EU-IST agent-DYSL project: "Accommodative Intelligent Educational Environments for Dyslexic Learners", Project Manager
2006 - 2008	EU COST292 action: Semantic Multimodal Analysis of Digital Media, Project Manager
2005 - 2006	inAccessNetworks S.A., Design, Implementation and Installation of Vodafone's Email Anti-spam System, phase 1 & 2, Networks & Systems Administrator
2005 - 2011	CE.R.T.H.-I.T.I., Researcher
2004 - 2007	ΙΤΕΤ-ΕΠΑΝ-03DSBEPRO-44 VisualAsset project, "VisualAsset, Multimedia Document Analysis, Information Extraction and Management", Project Manager
2004 - 2008	EU-IST aceMedia project, "Integrating Knowledge, Semantics and Content for User-Centred Intelligent Media Services", Project Manager
2003 - 2004	Leonardo SPERO project, "TeleInformatics System for Continuous Collection, Processing, Diffusion of Material for Teacher Training in Special Education", Project Manager
2002 - 2003	Ministry of Environment, Organization of Master Plan of Athens (ORSA), Operational Programme "Information Society", Networks & Systems Administrator, Technical Support
2002 - 2004	EU-IST FAETHON project, "Unified Intelligent Access to Heterogeneous Audiovisual Content", Project Manager
2002	EU-IST ERMIS project, "Emotionally Rich Man-machine Intelligent System", Developer
2002 - 2008	ICCS-NTUA, Researcher
2001 - 2002	SYN-96 project, "SYN-96: Development of a Video on Demand system using MPEG-2 standard for encoding in hotel-type business", Operational Program for Research and Technology II, Programmer
2001	WIN project, NCSR "Demokritos", Programmer
2001	Technical Chamber of Greece (TEE), ΔΕ A107/25/2001 - 356/2002, Task Force Member
2000	Ministry of Education, Research Project: «Further development, operation and maintenance of the integrated monitoring and evaluation system (IMES)», Developer
1998 - 1999	Hellenic Telecommunications Organization (OTE), Helpdesk clerk.

TEACHING EXPERTISE

2015 - 2016	Assistant Professor, **Ionian University**, Department of Informatics, "Social and Semantic Web", "Data mining & Data warehouses", "Information Retrieval", "Knowledge Management and Representation", "Computer Graphics", "Image Processing"
2014 - 2015	Assistant Professor, **Ionian University**, Department of Informatics, "Social and Semantic Web", "Data mining & Data warehouses", "Information Retrieval", "Knowledge Management and Representation", "Computer Graphics", "Image Processing"
2013 - 2014	Assistant Professor, **Ionian University**, Department of Informatics, "Social and Semantic Web", "Data mining & Data warehouses", "Information Retrieval", ""Knowledge Management and Representation", "Computer Graphics", "Image Processing"
2013	Adjunct Professor (GPD 407/80), **University of Central Greece**, Department of Computer Science, "Computer Systems Security "
2013	Adjunct Professor (GPD 407/80), **Ionian University**, Department of Informatics, "Social and Semantic Web", "Data mining & Data warehouses", "Information Retrieval", "Applied Artificial Intelligence"
2012	Adjunct Professor (GPD 407/80), **University of Central Greece**, Department of Computer Science, "Human-Computer Interaction"
2012	Adjunct Professor (GPD 407/80), **University of the Aegean**, School of Management, Department of Financial and Management Engineering, "Introduction to Informatics"
2011	Adjunct Professor (GPD 407/80), **University of Central Greece**, Department of Computer Science, "Computer Systems Security"
2011	Adjunct Professor (GPD 407/80), **University of Crete**, Department of Computer Science, "Computer Graphics" & "Multimedia Technologies"
2010 - 2011	Visiting Lecturer & Laboratory Teaching Associate, **Technological Educational Institute (T.E.I.) of Chalkis**, General Department of Applied Sciences, "Computer Programming" & "Informatics"
2010	Adjunct Professor (GPD 407/80), **University of the Aegean**, School of Management, Department of Financial and Management Engineering, "Computer Programming"
2009 - 2010	Organization, supervision and assessment of laboratory exercises in: *Human-computer interaction*, School of Electrical and Computer Engineering, **NTUA** (Assistant Professor).
2002 - 2007	Organization, supervision and assessment of laboratory exercises in: *Human-computer communication,* School of Electrical and Computer Engineering, **NTUA** (Assistant Professor).
2002 - 2007	Organization, supervision and assessment of laboratory exercises in: *Human-computer interaction*, School of Electrical and Computer Engineering, **NTUA** (Assistant Professor).
2002 - 2007	Organization, supervision and assessment of laboratory exercises in: *Imaging Technology & Analysis*, School of Electrical and Computer Engineering, **NTUA** (Assistant Professor).
2002 - 2007	Organization, supervision and assessment of laboratory exercises in: *Computer Graphics*, School of Electrical and Computer Engineering, **NTUA** (Assistant Professor).
2002 - 2007	Organization, supervision and assessment of laboratory exercises in: *Neural Networks and Intelligent Computer Systems*, School of Electrical and Computer Engineering, **NTUA** (Assistant Professor).
2002 - 2007	Organization, supervision and assessment of laboratory exercises in: *Digital Image Processing and Video Analysis*, School of Electrical and Computer Engineering, **NTUA** (Assistant Professor).

THESIS SUPERVISOR

01.2016	Ph.D. Thesis Committee Member, "Online social networks: real-time graph sampling, multilayered information diffusion, and equality issues", by Giannis Haralabopoulos, Department of Computer Science and Biomedical Informatics, University of Thessaly
11.2015 - …	Supervised Diploma thesis entitled "Development of an online photo management Android application", Department of Informatics, Ionian University
06.2015 - …	Supervised Diploma thesis entitled "A research study on contextual techniques", Department of Informatics, Ionian University
05.2015 - …	Supervised Diploma thesis entitled "Development of a personalized and context-aware tour recommendation system for social network users based on metadata information", Department of Informatics, Ionian University
12.2014 - …	Supervised Diploma thesis entitled "Study, design and implementation of metadata management algorithms for a multimedia information retrieval system", Department of Informatics, Ionian University
12.2014 - …	Supervised Diploma thesis entitled "An evaluation and risk management study of the Ionian University information system", Department of Informatics, Ionian University
12.2014 - …	Supervised Diploma thesis entitled "Design of machine learning algorithms on humanitarian data ", Department of Informatics, Ionian University
06.2013 - 09.2014	Supervised Diploma thesis entitled "Design and implementation of development methodologies and risk management of an Information System", Department of Computer Science and Biomedical Informatics, University of Central Greece.
10.2011	Supervised Diploma thesis entitled "Development of a web application in an environment iOS", Department of Computer Science, University of Crete.
10.2011	Supervised Diploma thesis entitled "Development of intelligent algorithms retrieval multimedia information (tags) with emphasis on semantics", Department of Computer Science, University of Crete.
07.2011	Supervised Diploma thesis entitled "Human-Computer Interaction in an integrated 3-D graphical visual first person (FPS)", Department of Computer Science, University of Crete.
07.2011	Supervised Diploma thesis entitled "Development of web application management of multimedia content in an Android environment", School of Electrical & Computer Engineering, National Technical University of Athens.

Invited Speaker

02.12.2015	Department of Informatics, Ionian University, Lecture entitled: "Visual Image Retrieval & Localization (VIRaL)"
01.10.2015	19th Panhellenic Conference on Informatics, Social Informatics II Session, Invited talk entitled: "PACiNNO - a Platform for Academic Cooperation in Innovation", TEI of Athens, Athens, Greece
21.05.2015	Department of Computer Science and Biomedical Informatics, University of Thessaly, Lecture entitled: "Exploiting open data and social media dynamics within an information management system", 6th Workshop Open Data & Source, IEEE Student Branch, Lamia, Greece
28.08.2013	3rd Hellenic Summer School of Artificial Intelligence, Department of Informatics, Ionian University, Lecture entitled: "Representation and Knowledge Technologies"
15.01.2013	Graduate Program, Department of Informatics, Ionian University, " Advanced Topics in Language Technology", Lecture entitled: "Online content retrieval issues»
04.12.2012	Graduate Program, Department of Informatics, Ionian University, "Advanced Topics in Language Technology", Lecture entitled: "Semantic web and multimedia»
27.11.2012	Graduate Program, Department of Informatics, Ionian University, "Advanced Topics in Language Technology", Lecture entitled: "Semantic knowledge representation"
16.05.2012	Graduate Program, Department of Informatics, Ionian University, "Applied Artificial Intelligence", Lecture entitled: "Semantic web and multimedia"
04.04.2012	Graduate Program, Department of Informatics, Ionian University, "Applied Artificial Intelligence", Lecture entitled: "Semantic Web and metadata"
07.03.2012	Graduate Program, Department of Informatics, Ionian University, "Applied Artificial Intelligence", Lecture entitled: "Semantic knowledge representation"
11.01.2012	Graduate Program, Department of Informatics, Ionian University, "Advanced Topics in Language Technology", Lecture entitled: "Semantic Web and metadata"
23.11.2011	Graduate Program, Department of Informatics, Ionian University, "Advanced Topics in Language Technology", Lecture entitled: "Semantic knowledge representation"

CONFERENCE AFFILIATIONS

2016
- 11th International Workshop on Semantic and Social Media Adaptation and Personalization (SMAP '16), Steering Committee member, Thessaloniki, Greece, October 20-21, 2016.
- 8th International Conference on Knowledge Engineering and Ontology Development (KEOD 2016), Program Committee member, Porto, Portugal, November 9-11, 2016.
- IEEE Computational Intelligence and Games Conference (IEEE CIG 2016), Publicity Chair, Santorini, Greece, September 20-23, 2016.
- 12th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI 2016), Program Committee member, Thessaloniki, Greece, September 16-18, 2016.
- 5th Mining Humanistic Data Workshop (MHDW 2016), in conjunction with the 12th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI 2016) , Programme Committee member, Thessaloniki, Greece, September 16-18, 2016.
- 17th International Conference on Engineering Applications of Neural Networks (EANN 2016) , Programme Committee member, Aberdeen, Scotland, September 2-5, 2016.
- International Joint Conference on Neural Networks (IJCNN 2016), Programme Committee member, Vancouver, Canada, July 25-29, 2016.
- 14th International Workshop on Content-Based Multimedia Indexing (CBMI 2016), Programme Committee member, Bucharest, Romania, June 15-17, 2016.
- "Top-K Shortest Path in Large Typed RDF Graphs Challenge" in conjunction with the 13th ESWC 2016, Crete, Greece, May 29-June 2, 2016.
- 1st Workshop on Smart Ubiquitous Context: Service Discovery & Adaptation (SuCDA '16) in conjunction with the 7th International Conference on Ambient Systems, Networks and Technologies (ANT 2016), Program Committee member, Madrid, Spain, May 23-26, 2016.
- 9th Hellenic Conference on Artificial Intelligence (SETN 2016), Program Committee member, Thessaloniki, Greece, May 18-20, 2016.
- The 22nd International Conference on Multimedia Modelling (MMM 2016), Program Committee member, Miami, Florida, USA, January 4-6, 2016.

2015
- 10th International Workshop on Semantic and Social Media Adaptation and Personalization (SMAP '15), Steering Committee member, Trento, Italy, November 5-6, 2015.
- Workshop on Visions on Internet of Cultural Things and Applications (VICTA 2015) in conjunction with the 11th International Conference on Signal Image Technology & Internet-based Systems (SITIS 2015), Program Committee member, Bangkok, Thailand, November 23-27, 2015.
- 7th International Conference on Knowledge Engineering and Ontology Development (KEOD 2015), Program Committee member, Lisbon, Portugal, November 12-14, 2015.
- The Tenth International Multi-Conference on Computing in the Global Information Technology (ICCGI 2015) , Programme Committee member, St. Julians, Malta, October 11-16, 2015.
- 19th Panhellenic Conference on Informatics (PCI 2015) , Programme Committee member, Athens, Greece, October 2015 1-3, 2015.
- 16th International Conference on Engineering Applications of Neural Networks (EANN 2015) , Programme Committee member, Rhodes, Greece, September 25-28, 2015.
- 4th Mining Humanistic Data Workshop (MHDW 2015), in conjunction with the 16th International Conference on Engineering Applications of Neural Networks (EANN 2015) , Programme Committee member, Rhodes, Greece, September 25, 2015.
- 2015 International Joint Conference on Neural Networks (IJCNN 2015), Programme Committee member, Killarney, Ireland, July 12-17, 2015.
- Symposium on Innovation and Entrepreneurship (SIE 2015) in conjunction with the 19th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2015), Programme Committee member, Orlando, Florida, USA, July 12-15, 2015.
- 13th International Workshop on Content-Based Multimedia Indexing (CBMI 2015), Programme Committee member, Prague, Czech Republic, June 10-12, 2015.

2014
- 9th International Workshop on Semantic and Social Media Adaptation and Personalization (SMAP '14), Steering Committee member & Local Organizer, Corfu, Greece, November 6-7, 2014.
- 6th International Conference on Knowledge Engineering and Ontology Development (KEOD 2014), Program Committee member, Rome, Italy, October 14-16, 2014.
- 3rd Mining Humanistic Data Workshop (MHDW 2014), in conjunction with 10th International Conference on Artificial Intelligence Applications and Innovations (AIAI 2014), Program Committee

member, Island of Rhodes, Greece, September 19-21, 2014.
- · 2014 International Joint Conference on Neural Networks, Program Committee member, Beijing, China, July 6-11, 2014.
- · 9th International Multi-Conference on Computing in the Global Information Technology (ICCGI 2014), Program Committee member, Seville, Spain, June 22-26, 2014.
- · 12th International Workshop on Content-Based Multimedia Indexing (CBMI 2014), Program Committee member, Klagenfurt, Austria, June 18-20, 2014.
- · 8th Hellenic Conference on Artificial Intelligence (SETN 2014), Program Committee member, Ioannina, Greece, May 15-17, 2014.

2013
- · 8th International Workshop on Semantic and Social Media Adaptation and Personalization (SMAP '13), Steering Committee member, Bayonne, France, December 12-13, 2013.
- · 21st ACM International Conference on Multimedia (ACM MM 2013), Program Committee member, Barcelona, Spain, October 21-25, 2013.
- · 9th Artificial Intelligence Applications and Innovations Conference (AIAI 2013), Program Committee member, Paphos, Cyprus, September 30 - October 2, 2013.
- · 17th Panhellenic Conference on Informatics (PCI 2013), Program Committee member, Thessaloniki, Greece, September 19-21, 2013.
- · 5th International Conference on Knowledge Engineering and Ontology Development (KEOD 2013), Program Committee member, Vilamoura, Algarve, Portugal, 19-22 September 2013.
- · 2nd Mining Humanistic Data Workshop (MHDW 2013), Program Committee member, Halkidiki, Greece, September 13-16, 2013.
- · 14th Conference on Engineering Applications of Neural Networks (EANN 2013), Program Committee member, Halkidiki, Greece, September 6-9, 2013.
- · The 2013 International Workshop on Social Computing, Network & Services (SocialComNet 2013), in conj. with FutureTech 2013, Program Committee member, Gwangju, Korea, September 4-6, 2013.
- · The Eighth International Multi-Conference on Computing in the Global Information Technology (ICCGI 2013), Program Committee member, Nice, France, July 21-26, 2013.
- · 11th International Workshop on Content-Based Multimedia Indexing (CBMI 2013), Program Committee member, Veszprem, Hungary, June 17-19, 2013.

2012
- · 7th International Workshop on Semantic Media Adaptation and Personalization (SMAP '12), Steering Committee member, Luxembourg, Luxembourg, December 3-4, 2012.
- · Andescon 2012, Program Committee member, Cuenca, Equador, November 7-9, 2012.
- · ACM Multimedia 2012 (MM'12), Program Committee member, Nara, Japan, October 29 - November 2, 2012.
- · 16th Panhellenic Conference on Informatics (PCI 2012), Program Committee member, Piraeus, Greece, October 5-7, 2012.
- · 10th Workshop on Content-Based Multimedia Indexing (CBMI 2012), Program Committee member, Annecy, France, June 27-29, 2012.
- · 7th Hellenic Conference on Artificial Intelligence (SETN 2012), Special Session Chair, Lamia, Greece, May 28-31, 2012.
- · 18th International Conference on MultiMedia Modeling (MMM 2012), Program Committee member, Klagenfurt, Austria, January 4-6, 2012.

2011
- · 9th International Workshop on Content-Based Multimedia Indexing (CBMI 2011), Program Committee member, Madrid, Spain, June 13-15, 2011.
- · 6th International Workshop on Semantic Media Adaptation and Personalization (SMAP '11), Steering Committee member, Vigo, Spain, December 1-2, 2011.
- · 15th Panhellenic Conference on Informatics (PCI 2011), Program Committee member, Kastoria, Greece, September 30 - October 2, 2011.

2010
- · 2nd ACM International Workshop on Events in Multimedia (EiMM10), in conjunction with ACM Multimedia 2010, Program Committee member, Firenze, Italy, October 25-29, 2010.
- · 1st International Workshop on Adaptation, Personalization and REcommendation in the Social-semantic Web (APRESW 2010), in conjunction with 7th Extended Semantic Web Conference (ESWC 2010), Program Committee member, Heraklion, Greece, May 30, 2010.
- · 1st International Workshop "EVENTS 2010 - Recognising and tracking events on the Web and in real life", in conjunction with the 6th Hellenic Conference on Artificial Intelligence (SETN 2010), General

Chair, Athens, Greece, May 5-7, 2010.

- 8th International Workshop on Content-Based Multimedia Indexing (CBMI 2010), Program Committee member, Grenoble, France, June 23-25, 2010.
- 5th International Workshop on Semantic Media Adaptation and Personalization (SMAP '10), General Chair, Limassol, Cyprus, December 9-10, 2010.

2009
- 4th International Workshop on Semantic Media Adaptation and Personalization (SMAP '09), General Chair, San Sebastian, Spain, December 14-15, 2009.
- 1st ACM International Workshop on Events in Multimedia (EiMM09), in conjunction with ACM Multimedia, Program Committee member, Beijing, China, October 19-24, 2009.
- 7th International Workshop on Content-Based Multimedia Indexing (CBMI 2009), Special Session Chair, Program Committee member, Local Arrangements, Chania, Greece, June 3-5, 2009.

2008
- 3rd International Workshop on Semantic Media Adaptation and Personalization (SMAP '08), General Chair, Prague, Czech Republic, December 15-16, 2008.
- 1st International Workshop on Collective Semantics: Collective Intelligence & the Semantic Web (CISWeb 2008) , in conjunction with the 5th European Semantic Web Conference (ESWC-08), Program Committee member, Tenerife, Spain, June 1, 2008.

2007
- 2nd International Workshop on Semantic Media Adaptation and Personalization (SMAP '07), General Chair, London, United Kingdom, December 17-18, 2007.
- 1st Workshop on Multimedia Annotation and Retrieval enabled by Shared Ontologies (MAReSO), in conjunction with the 2nd International Conference on Semantics And digital Media Technologies (SAMT2007), Program Committee member, Genova, Italy, December 5, 2007.
- International Workshop on Ubiquitous and Decentralized User Modeling (UBIDEUM '07), in conjunction with the 11th International Conference on User Modeling (UM 2007), Workshop Organizer, Corfu, Greece, June 26, 2007.

2006
- 1st International Conference on Semantic and Digital Media Technologies (SAMT '06), Special Session Organizer & Local Arrangements, Athens, Greece, December 6-8, 2006.
- 1st International Workshop on Semantic Media Adaptation and Personalization (SMAP '06), General Chair, Athens, Greece, December 4-5, 2006.

2005
- Closing Workshop of Research and Technology Training Network on Multimedia Knowledge Discovery and Management (MULTI-MINE '05), Local Arrangements, Athens, Greece, June 28, 2005.

2004
- SPERO Workshop: TeleInformatics System for Continuous Collection, Processing, Diffusion of Material for Teacher Training in Special Education, Local Arrangements, Athens, Greece, Nov. 5, 2004.

2003
- Workshop on Intelligent Access to Audiovisual Content (WIAAC), Local Arrangements, Athens, Greece, April 3, 2003.

2001
- International Workshop on Very Low Bitrate Video Coding (VLBV '01), Local Arrangements, Athens, Greece, October 11-12, 2001.

INTERNATIONAL JOURNAL REVIEWER

2015 - …   Inderscience - **International Journal of Human Resources Development and Management** [ISSN: 1465-6612]

2014 - …   Elsevier - **Information Sciences** [ISSN: 0020-0255]
Inderscience - **International Journal of Continuing Engineering Education and Life-Long Learning [**ISSN: 1560-4624]
Hindawi - **The Scientific World Journal [**ISSN: 2356-6140]

2013 - …   Springer - **Artificial Intelligence Review** [ISSN: 0269-2821]
Hindawi - **American Journal of Software Engineering and Applications** [ISSN: pending]
Springer - **Cognitive Computation** [ISSN: 1866-9956]
Springer - **Computer Methods and Programs in Biomedicine** [ISSN: 0169-2607]

2012 - …   Springer - **World Wide Web Journal** [ISSN: 1386-145X]
Hindawi - **Advances in Multimedia** [ISSN: 1687-5680]
Elsevier - **Pattern Recognition Letters** [ISSN: 0167-8655]
World Scientific Publishing - **International Journal on Artificial Intelligence Tools** [ISSN: 0218-2130]

2011 - …   Elsevier - **Computer Vision and Image Understanding** [ISSN: 1077-3142]
IEEE - **IEEE Transactions on Multimedia** [ISSN: 1520-9210]
Inderscience - **International Journal of Ad Hoc and Ubiquitous Computing** [ISSN: 1743-8225]

2010 - …   Slovenian Society Informatika - **Informatica** [ISSN: 0350-5596]

2009 - …   Elsevier - **Neural Networks** [ISSN: 0893-6080]
Chinese Fuzzy Systems Association - **International Journal of Fuzzy Systems** [ISSN: 1562-2479]

2008 - …   ACM - **Transactions on Multimedia Computing, Communications & Applications** [ISSN: 551-6857]

2007 - …   Eurasip - **Signal Processing** [ISSN: 0165-1684]
Elsevier – **Neurocomputing** [ISSN: 0925-2312]
Academy Publisher - **Journal of Networks** [ISSN: 1796-2056]

2006 - …   IEEE - **IEEE Transactions on Circuits and Systems for Video Technology** [ISSN: 1051-8215]
Elsevier **- Journal of Visual Communication and Image Representation** [ISSN: 1047-3203]

2004 - …   Springer - **Multimedia Tools and Applications** [ISSN: 1380-7501]

JOURNAL GUEST EDITOR

[EJ1]   S. Sioutas, L. Iliadis, K.-L. Kermanides, **Ph. Mylonas** (eds.), Elsevier - Special Issue on Mining the Humanities: Technologies and Applications, Engineering Applications of Artificial Intelligence (EAAI), [ISSN: 0952-1976], **in press**

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[C53] **Ph. Mylonas** and Y. Avrithis, *Context modelling for multimedia analysis,* 5th International and Interdisciplinary Conference on Modeling and Using Context (CONTEXT '05), Paris, France, July 5-8, 2005.

[C54] **Ph. Mylonas**, P. Tzouveli and S. Kollias, *Intelligent content adaptation in the framework of an integrated e-learning system,* 16th ACM Conf. on Hypertext & Hypermedia - Workshop on Combining Intelligent & Adaptive Hypermedia Methods/Techniques in Web-Based Education Systems, Salzburg, Austria, September 6-9, 2005

[C55] G. Andreou, **Ph. Mylonas**, M. Wallace, S. Kollias, *Offering Access to Personalized Interactive Video,* International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering, Athens, Greece, December 2004

[C56] M. Wallace, **Ph. Mylonas**, S. Kollias, *Automatic Extraction of Semantic Preferences from Multimedia Documents,* 5th International Workshop on Image Analysis for Multimedia Interactive Services, Lisboa, Portugal, April 2004

[C57] **Ph. Mylonas**, G. Andreou and S. Kollias, *Personalised Interactive Video User Experience,* International Conference on Multi-platform e-Publishing, Athens, Greece, November 2004

[C58] **Ph. Mylonas**, K. Karpouzis, G. Andreou and S. Kollias, *Towards an integrated personalized interactive video environment,* 6th IEEE International Symposium on Multimedia Software Engineering (ISMSE'04), Miami, Florida, U.S.A., December 2004

[C59] **Ph. Mylonas**, M. Wallace, S. Kollias, *Using k-nearest neighbor and feature selection as an improvement to hierarchical clustering,* 3rd Hellenic Conference on Artificial Intelligence, Samos, Greece, May 2004

[C60] **Ph. Mylonas**, P. Tzouveli and S. Kollias, *Towards a personalized e-learning scheme for teachers,* 4th IEEE International Conference on Advanced Learning Technologies, Joensuu, Finland, August 2004

[C61] P. Tzouveli, **Ph. Mylonas** and S. Kollias, *SPERO - A personalized integrated e-learning system,* International Association for Development of the Information Society (IADIS) WWW/Internet 2004 International Conference, Madrid, Spain, October 2004

[C62] M. Wallace, G. Akrivas, **Ph. Mylonas**, Y. Avrithis, S. Kollias, *Using context and fuzzy relations to interpret multimedia content,* 3rd International Workshop on Content-Based Multimedia Indexing (CBMI), IRISA, Rennes, France, September 2003

[C63] M. Wallace, **Ph. Mylonas**, S. Kollias, *Detecting and Verifying Dissimilar Patterns in Unlabelled Data,* 8th Online World Conference on Soft Computing in Industrial Applications (WSC8), September - October 2003

SHORT SCIENTIFIC WORK MEMORANDUM

BRIEF SUMMARY OF 5 SELECTED PUBLICATIONS IN INTERNATIONAL JOURNALS

[J6] **Ph. Mylonas**, E. Spyrou, Y. Avrithis, S. Kollias, "Using Visual Context and Region Semantics for High-Level Concept Detection", *IEEE Transactions on Multimedia*, Vol. 11, Issue 2, February 2009, pp. 229-243.

In this paper we investigate detection of high-level concepts in multimedia content through an integrated approach of visual thesaurus analysis and visual context. In the former, detection is based on model vectors that represent image composition in terms of region types, obtained through clustering over a large data set. The latter deals with two aspects, namely high-level concepts and region types of the thesaurus, employing a model of a priori specified semantic relations among concepts and automatically extracted topological relations among region types; thus it combines both conceptual and topological context. A set of algorithms is presented, which modify either the confidence values of detected concepts, or the model vectors based on which detection is performed. Visual context exploitation is evaluated on TRECVID and Corel data sets and compared to a number of related visual thesaurus approaches.

[J7] **Ph. Mylonas**, D. Vallet, P. Castells, M. Fernández, Y. Avrithis, "Personalized Information Retrieval Based on Context and Ontological Knowledge", *Knowledge Engineering Review*, Cambridge University Press, Vol. 23, Issue 1, March 2008, pp. 73-100.

Context modeling has been long acknowledged as a key aspect in a wide variety of problem domains. In this paper we focus on the combination of contextualization and personalization methods to improve the performance of personalized information retrieval. The key aspects in our proposed approach are a)the explicit distinction between historic user context and live user context, b) the use of ontology-driven representations of the domain of discourse, as a common, enriched representational ground for content meaning, user interests, and contextual conditions, enabling the definition of effective means to relate the three of them, and c) the introduction of fuzzy representations as an instrument to properly handle the uncertainty and imprecision involved in the automatic interpretation of meanings, user attention, and user wishes. Based on a formal grounding at the representational level, we propose methods for the automatic extraction of persistent semantic user preferences, and live, ad-hoc user interests, which are combined in order to improve the accuracy and reliability of personalization for retrieval.

[J8] **Ph. Mylonas**, Th. Athanasiadis, M. Wallace, Y. Avrithis, S. Kollias, "Semantic Representation of Multimedia Content - Part I: Knowledge Representation & Semantic Indexing", *Multimedia Tools and Applications*, Vol. 39, Issue 3, September 2008, pp. 293-327.

In this paper we present a framework for unified, personalized access to heterogeneous multimedia content in distributed repositories. Focusing on semantic analysis of multimedia documents, metadata, user queries and user profiles, it contributes to the bridging of the gap between the semantic nature of user queries and raw multimedia documents. The proposed approach utilizes as input visual content analysis results, as well as analyzes and exploits associated textual annotation, in order to extract the underlying semantics, construct a semantic index and classify documents to topics, based on a unified knowledge and semantics representation model. It may then accept user queries, and, carrying out semantic interpretation and expansion, retrieve documents from the index and rank them according to user preferences, similarly to text retrieval. All processes are based on a novel semantic processing methodology, employing fuzzy algebra and principles of taxonomic knowledge representation. Part I of this work presented in this paper deals with data and knowledge models, manipulation of multimedia content annotations and semantic indexing, while Part II will continue on the use of the extracted semantic information for personalized retrieval.

[J10] D. Vallet, P. Castells, M. Fernández, **Ph. Mylonas** and Y. Avrithis, "Personalized Content Retrieval in Context Using Ontological Knowledge", *IEEE Transactions on Circuits and Systems for Video Technology*, Vol. 17, Issue 3, March 2007, pp. 336-346.

Personalized content retrieval aims at improving the retrieval process by taking into account the particular interests of individual users. However, not all user preferences are relevant in all situations. It is well known that human pref-erences are complex, multiple, heterogeneous, changing, even contradictory, and should be understood in context with the user goals and tasks at hand. In this paper we propose a method to build a dynamic representation of the semantic context of ongoing retrieval tasks, which is used to activate different subsets of user interests at runtime, in a way that out–of-context preferences are discarded. Our approach is based on an ontology-driven representation of the domain of discourse, providing enriched descriptions of the semantics involved in retrieval actions and preferences, and enabling the definition of effective means to relate preferences and context.

[J12] Th. Athanasiadis, **Ph. Mylonas**, Y. Avrithis and S. Kollias, "Semantic Image Segmentation and Object Labeling", *IEEE Transactions on Circuits and Systems for Video Technology*, Vol. 17, Issue 3, March 2007, pp. 298 - 312.

In this paper we present a framework for simultaneous image segmentation and object labeling leading to automatic image annotation. Focusing on semantic analysis of images, it contributes to knowledge-assisted multimedia analysis and the bridging of the gap between its semantics and low level visual features. The proposed framework operates at semantic level using possible semantic labels, formally defined as fuzzy sets, to make decisions on handling image regions instead of visual features used traditionally. In order to stress its independence of a specific image segmentation approach we have modified two well known region growing algorithms, i.e. watershed and recursive shortest spanning tree, and compared them with their traditional counterparts. Additionally, a visual context representation and analysis approach is presented, blending global knowledge in interpreting each object locally. Contextual information is based on a novel semantic processing methodology, employing fuzzy algebra and ontological taxonomic knowledge representation. In this process, utilization of contextual knowledge re-adjusts semantic region growing labeling results appropriately, by means of fine-tuning the membership degrees of detected concepts. The performance of the overall methodology is demonstrated on a real-life still image dataset from two popular domains.