

# CURRICULUM VITAE

Concerning

**KLIMIS S. NTALIANIS**

*Dr. Electrical and Computer Engineer, NTUA*

## **1. Personal Data**

Name and Surname:	Klimis S. Ntalianis
Date of Birth:	12 September 1975
Place of Birth:	Athens
Nationality:	Greek
Profession:	Electrical and Computer Engineer (PhD)
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## 2. Degrees

- (January 2005 – June 2006): Postdoctoral research at National Technical University of Athens entitled “Protection of sensitive personal data and ensuring of controlled access to multimedia information, by implementing encryption methods based on chaotic maps in the frequency space (State Scholarships Foundation).
- (March 2004 – February 2006): Postdoctoral research at National Technical University of Athens entitled “Intelligence and emotions in interactive environments” (In the framework of programme “PYTHAGORAS: Support of Research Teams in Universities”).
- (December 1998 – December 2002): PhD in the department of Electrical and Computer Engineers of the National Technical University of Athens.

The general focus of the PhD thesis was related to the Theory of Intelligent Systems for Machine Vision. In particular it focused in the following areas: (1) semantic segmentation of video sequences, (2) data organization based on content and (3) secure access and intellectual property protection of digital content. In these directions several methods were proposed towards extraction of video objects, spatio-temporal relation of them as well as watermarking and encryption methods.

The title of the PhD thesis was “Semantic Segmentation of Video Sequences and Applications in the Areas of Content Organization and Information Hiding”. The thesis was marked as “Excellent” by the 7-member supervising and examination committee.

- (September 1993 – June 1998): Diploma in Electrical and Computer Engineering from the National Technical University of Athens. Scientific Stream: Telecommunications. Title of diploma thesis: “Modeling of Video Sequences for Optimizing Source Distribution in Networks”. The diploma thesis was marked as “Excellent” (10/10). Parts of the diploma thesis were published in an international journal and two international conferences.
- (June 1993): Graduation from the 1<sup>st</sup> High School of Egaleo.

## 3. Professional and Research Activities

### 3.1 Current Positions

- After finishing my military service and from February 2004 I work as a senior researcher and project coordinator in the Image, Video and Multimedia Laboratory (IVML) of the National Technical University of Athens (Lab Director: Prof. S. Kollias).

- From February 2005 I work as a lecturer (on contractual basis) at the University of Peloponnese (Department of Computer Science and Technology and Department of Telecommunications Science and Technology).
- From January 2010 I work as a lecturer (on contractual basis) at the Hellenic Air Force (Military Institution of University Education).
- From January 2010 I work as a visiting lecturer at the Cyprus University of Technology (Department of Communication and Internet Studies)
- In January 2010 I was elected Assistant Professor at the Technological Educational Institute of Athens (Department of Marketing, Specialization: “Multimedia over the Internet”).

### ***3.2 Teaching Experience***

- Laboratory assistant of the lesson Digital Signal Processing (NTUA, Department of Electrical and Computer Engineers, 1998-1999).
- Laboratory assistant of the lesson Multimedia Technology (NTUA, Department of Electrical and Computer Engineers, 1998-1999).
- Teaching of teachers of secondary schools in topics relevant to computer networks and software usage in the framework of EPEAEK programme – “Databank for Special Education Schools” (1998-2000).
- Laboratory assistant of the lesson Computer Graphics (NTUA, Department of Electrical and Computer Engineers, 1999- 2001).
- Laboratory assistant of the lesson Neural Networks Technology (NTUA, Department of Electrical and Computer Engineers, 2000-2001).
- Teaching in the framework of programme “PYTHAGORAS: SUPPORT of RESEARCH TEAMS in the UNIVERSITIES”, of parts of the lesson Signals and Systems (NTUA, Department of Electrical and Computer Engineers, 2004-2006).
- Adjoint Lecturer (PD407/80) teaching the Computer Graphics - Fractals course (Department of Computer Science and Technology, University of Peloponnese, February – September 2005).
- Adjoint Professor teaching the Informatics course (Hellenic Naval Academy, September 2006– June 2007).
- Adjoint Lecturer (PD407/80) teaching the courses “Object-Oriented Programming”, “Logic and Functional Programming” and “Neural Networks” (Department of Computer Science and Technology, University of Peloponnese, September 2006 – August 2007).
- Adjoint Professor teaching the Informatics course (Hellenic Naval Academy, September 2007– June 2008).
- Adjoint Lecturer (PD407/80) teaching the course “Informatics” (Hellenic Naval Academy, September 2008 – February 2009).

- Adjoint Lecturer (PD407/80) teaching the courses “Multimedia Compression and Transmission” and “Digital Signal Processors” (Department of Telecommunications Science and Technology, University of Peloponnese, September 2008 – August 2009).
- Adjoint Lecturer (PD407/80) teaching the courses “Multimedia Compression and Transmission” and “Digital Signal Processors” (Department of Telecommunications Science and Technology, University of Peloponnese, September 2009 – August 2010).
- Adjoint Lecturer (PD407/80) teaching the course “Computer Networking” (Hellenic Air Force, January 2010 – August 2010).
- Visiting Lecturer teaching the courses “Digitization of Cultural Heritage” and “Information and Knowledge Management” (Department of Communication and Internet Studies, Cyprus University of Technology, January 2010 – May 2010).

### ***3.3 Participation in Research and Development Projects***

At the time of writing this CV I have participated in the writing, submission or development of more than 20 research and development scientific proposals in the frameworks of calls for proposals of the General Secretariat of Research and Technology of Greece, the Research Promotion Foundation of Cyprus and the European Union. An analytical list follows, containing only the already funded proposals.

<b>FRAMEWORK</b>	<b>SHORT NAME</b>	<b>FULL NAME</b>	<b>DURATION</b>
ESPRIT 22266	M-CUBE	Mediterranean Multimedia: Multimedia Support Centre For Culture And Arts	30 months (1996-1999)
TMR	PHYSTA	Principled Hybrid Systems: Theory And Applications	36 months (1997-2001)
EPEAEK	TPEA	Databank for Special Education Schools	26 months (1998-2000)
MM Task Force	MODULATES	Multimedia Organisation for Developing the Understanding and Learning of Advanced Technology inpean Schools	28 months (1998-2000)
-	GGTP	Digital Archiving of Audiovisual Data From the Ministry of Press and Mass Media	7 months (1999-2000)
PABE-99	-	A Digital System for Audiovisual Broadcasts Surveillance	18 months (1999-2000)
EPET II	PANORAMA	An Intelligent System for Retrieval and	22 months

		Mining of Audiovisual Material	(1999-2001)
PABE-99	-	A Distributed System for Visual Surveillance and Intrusion Detection	12 months (2000-2001)
IST	ORESTEIA	Modular Hybrid Artefacts with Adaptive Functionality	36 months (2001-2003)
IST	FAETHON	Unified Intelligent Access to Heterogeneous Audiovisual Content	30 months (2001-2003)
Leonardo	SPERO	TeleInformatics System for Continuous Collection, Processing, Diffusion of Material for Teacher Training in Special Education	36 months (2002-2004)
PENED	ONTOMEDIA	Semantic Analysis of Multimedia Using Knowledge Technologies	36 months (2003-2006)
FP6 - Integrated Project	ASK-IT	Ambient Intelligence System of Agents for Knowledge-based and Integrated Services for Mobility Impaired Users	48 months (2005-2008)
FP6 - Integrated Project	MESH	Multimedia Semantic Syndication for Enhanced News Services	36 months (2006-2008)
FP6 – STREP	AGENT-DYSL	Accommodative Intelligent Educational Environments for Dyslexic Learners	36 months (2007-2009)
Information Society– Processing of Images, Sounds and Language	MORFES	Spatiotemporal Modeling of Standing, Full-Length and Dimidiated Figures in Works of Art, by Retrieval of Proportions, based on the Monuments of the Foundation of the Holy Monastery of Mount Sinai	18 months (2006 – 2008)
Information Society– Processing of Images, Sounds and Language	ICONOGNOSIA	Development of a System for Management and Sophisticated Access to Scientific Data and Annotation Metadata of Byzantine Works of Art, Using Intelligent Tools for Ontology Classification, Indexing, Retrieval-Mining and Visualization of Content	18 months (2006 – 2008)
RPF–	PSIFIORIKSI	Digitization of AudioVisual Content and	24 months

Program of Scientific Collaboration with Distinguished Scientists from Abroad		Extraction, Mining and Management κατ of Multimedia Metadata based on MPEG standards	(2006 – 2008)
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### 3.4 Professional Experience

- 01/01/1999 – 31/12/2000**      **PORTAL DEVELOPMENT FOR SPECIAL EDUCATION SCHOOLS AND TRAINING OF SECONDARY SCHOOL TEACHERS**  
 ➤ *Organization:* Institute of Communication and Computer Systems
- 01/10/1999 – 30/04/2000**      **DIGITIZATION, COMPRESSION, WATERMARKING AND ANNOTATION OF MULTIMEDIA CONTENT FROM THE MINISTRY OF PRESS AND MASS MEDIA**  
 ➤ *Organization:* Institute of Communication and Computer Systems
- 01/07/1999 – 31/12/2000**      **DEVELOPMENT OF A MULTIMEDIA NETWORK TRAFFIC SURVEILLANCE SYSTEM**  
 ➤ *Organization:* Institute of Communication and Computer Systems
- 01/11/1999– 31/08/2001**      **DESIGN AND DEVELOPMENT OF AN INTELLIGENT SYSTEM FOR CONTENT BASED MULTIMEDIA SEARCH AND RETRIEVAL**  
 ➤ *Organization:* Institute of Communication and Computer Systems
- 01/11/2000 – 31/10/2001**      **DEVELOPMENT OF A SURVEILLANCE INTRUSION DETECTION SYSTEM**  
 ➤ *Organization:* Institute of Communication and Computer Systems
- 01/01/2001– 31/12/2003**      **RESEARCH AND DEVELOPMENT OF INTELLIGENT MOBILE DEVICES FOR MONITORING AND SUPPORTING THE HEALTH OF AGED AND ILL PERSONS**  
 ➤ *Organization:* Institute of Communication and Computer Systems
- 01/05/2001 – 30/10/2003**      **RESEARCH AND DEVELOPMENT OF INTELLIGENT ALGORITHMS FOR ANALYZING AND INTERCONNECTING MULTIMEDIA CONTENT, FOCUSING ON OPTIMAL CONTENT BASED SEARCH AND RETRIEVAL**  
 ➤ *Organization:* Institute of Communication and Computer Systems
- 01/01/2002 – 31/12/2004**      **DEVELOPMENT OF AN INTELLIGENT PLATFORM FOR COLLECTING, PROCESSING AND DISTRIBUTING OF INSTRUCTIONAL MATERIAL FOR SPECIAL EDUCATION TEACHERS**  
 ➤ *Organization:* Institute of Communication and Computer Systems

- 01/12/2002 – 31/05/2003**      **DEVELOPMENT OF AN ALGORITHM FOR CREATING PANORAMIC VIEW OF THE KEEL OF SHIPS, BASED ON SUBMARINE RECORDINGS, AND WITH THE AIM OF DETECTING CRACKS AND OTHER DEFECTS**
- *Organization:* Algosystems S.A.
- 01/01/2003 – 30/04/2003**      **TRANSLATION– SCIENTIFIC REDACTION OF PARTS OF THE BOOK “SOFTWARE ENGINEERING: THEORY AND PRACTICE”, Shari Lawrence Pfleeger,Prentice Hall**
- *Organization:* Kleidarithmos Publications
- 01/02/2004 – 31/10/2004**      **TRANSLATION– SCIENTIFIC REDACTION OF THE BOOK “ALGORITHMS IN JAVA”, 3RD EDITION, Robert Sedgewick (Princeton University), Addison-Wesley**
- *Organization:* Kleidarithmos Publications
- 01/01/2005 – 31/12/2008**      **DEVELOPMENT OF INTELLIGENT COMMUNICATION, ROUTING AND SUPPORTING SERVICES FOCUSING ON PERSONS WITH MOBILITY PROBLEMS**
- *Organization:* Institute of Communication and Computer Systems
- 01/03/2006 – 28/02/2007**      **RESEARCH AND DEVELOPMENT OF ONTOLOGIES, ALGORITHMS AND DESCRIPTION STRUCTURES FOR MULTIMEDIA NEWS CONTENT, FOCUSING ON CONTENT ANALYSIS AND KNOWLEDGE EXTRACTION ON MOBILE AND OTHER DEVICES**
- *Organization:* Informatics and Telematics Institute, Center for Research and Technology Hellas
- 03/10/2006 – 31/12/2008**      **DIGITIZATION OF AUDIO-VISUAL DATA AND EXTRACTION AND MANAGEMENT OF MULTIMEDIA METADATA BASED ON THE MPEG STANDARDS**
- *Organization:* Institute of Communication and Computer Systems
- 01/09/2006 – 31/12/2009**      **DEVELOPMENT OF AN INTELLIGENT EDUCATIONAL ENVIRONMENT FOR DYSLEXIC LEARNERS**
- *Organization:* Institute of Communication and Computer Systems

### ***3.5 Evaluations, Research Studies and Consultancies***

- Evaluator of the committee 48/2000 of ASEP for employing staff in the public sector (Prefectures, Local Government) (March 2000 – May 2000).
- Writing (main writer) of the horizontal “Research Study of Technologies and Processes for Digitizing of Moving Pictures” in the framework of the Priority Axis 1: Education and Culture, Measure 1.3: Annotation, Exploitation and Dissemination of the Greek Culture (Call 65) of the Information Society Programme. Funding of Research Study: 150.000,00 Euro. Budget of the Call: 55.000.000,00 Euro (March 2003 – March 2005).

- Evaluation of the competition “Digitization and Dissemination of the Cultural Archive of the The Hellenic Literary and Historical Archive (EAIA)”. Project Funding: 500.000,00 Euro (March 2005 – May 2005).
- Twenty five expert consultancies on behalf of Information Society S.A., for 25 different calls for proposals of 19 organizations, in the framework of Call 65, concerning the following of the standards described in the horizontal research studies (September 2005 – September 2006).
- Writing (main writer) of the research study: “Exploitation capabilities of an IVR (Interactive Voice Response) platform from the Greek Secretariat of Research and Technology”, on behalf of Planning S.A. (www.planning.gr). Funding of research study: 7.500,00 Euro. (November 2008).
- Writing (main writer) of the research study: “Knowledge technologies for managing multimedia cultural content”, in the framework of Priority Axis 1: Education and Culture, of the Information Society Programme. Funding of the research study: 46.400,00 Euro. (October 2008 – December 2008).
- Writing (main writer) of the research study: “Exploitation capabilities of an IVR (Interactive Voice Response) platform from the Municipality of Holargos”, on behalf of Planning S.A. (www.planning.gr). Funding of research study: 7.500,00 Euro. (December 2008).
- Expert evaluator for the Research Promotion Foundation of Cyprus in the framework of the programme “Research for Companies - Product” (February – March 2010).
- Expert evaluator for the General Secretariat for Research and Technology of Greece in the framework of the Action “Collaboration” (March 2010).

## **4. Writing Activities**

My writing activities are presented in the following subsections. I have submitted 21 papers in International Journals and 61 papers in Conferences. I have also written several research proposals and project deliverables.

### ***4.1 Editorship of International Conferences Proceedings***

- Editorship of the Proceedings of the “International Conference on Very-Low Bit-Rate Video (VLBV’01)”, Athens, Greece, October 2001.
- Editorship of the Proceedings of the “International Conference on Artificial Neural Networks (ICANN’06)”, Athens, Greece, September 2006.

### ***4.2 Monographies – Scientific Books***

- Translation and Scientific Redaction of the Book: Shari Lawrence Pfleeger, Software engineering: Theory and practice, Prentice Hall, (Chapters 11 - 16): Κλήμης Νταλιάνης, Τεχνολογία λογισμικού: Θεωρία και Πράξη, Εκδόσεις Κλειδάριθμος 2003.



- Translation and Scientific Redaction of the Book: Robert Sedgewick, Algorithms in Java, 3rd edition, Addison –Wesley: Κλήμης Νταλιάνης, Αλγόριθμοι σε Java, Εκδόσεις Κλειδάριθμος, 2005.

### **4.3 Theses**

- [T.1] K. Ntalianis, “Modeling of Video Sequences for Optimizing Source Distribution in Networks” Diploma Thesis, Informatics Branch, Department of Electrical and Computer Engineers, NTUA, June 1998.
- [T.2] K. Ntalianis, “Semantic Segmentation of Video Sequences and Applications in the Areas of Content Organization and Information Hiding” PhD Thesis, Informatics and Computers Technology Branch, Department of Electrical and Computer Engineers, NTUA, December 2002.
- [T.3] K. Ntalianis,, “Intelligence and emotions in interactive environments,” Postdoctoral Thesis, Informatics and Computers Technology Branch, Department of Electrical and Computer Engineers, NTUA, June 2006.
- [T.4] K. Ntalianis,, “Protection of sensitive personal data and ensuring of controlled access to multimedia information, by implementing encryption methods based on chaotic maps in the frequency space,” Postdoctoral Thesis, Informatics and Computers Technology Branch, Department of Electrical and Computer Engineers, NTUA, June 2006.

### **4.4 International Journals (with reviewers)**

- [J.1] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, “Traffic Analysis and Modeling of Real World Video Encoders,” in Computational Intelligence and Applications, World Scientific and Engineering Society Press, vol. 1, No. 1, p.p. 372-380, 1999.
- [J.2] A. D. Doulamis, N. D. Doulamis, K. S. Ntalianis and S. D. Kollias, “Efficient Unsupervised Content-Based Segmentation in Stereoscopic Video Sequence” in International Journal on Artificial Intelligence Tools, vol 8, no.6, 2000.
- [J.3] N. D. Doulamis, A. D. Doulamis, K. S. Ntalianis, and S. D. Kollias, “Neural Networks Retraining in Image Analysis Problems,” in Neural Networks, Acta Press, vol. 1, No. 2, p.p. 107-117, 2000.
- [J.4] Nikolaos D. Doulamis, Anastasios D. Doulamis, Y. Avrithis, K. Ntalianis and S. Kollias, "Efficient Summarization of Stereoscopic Video Sequences," IEEE Trans. on Circuits & Systems for Video Technology, Vol. 10, No. 4, pp. 501-517, June 2000.
- [J.5] P. K. Tzouveli, K. S. Ntalianis, N. A. Tsapatsoulis and S. D. Kollias, “Automatic Face Region Watermarking Using Qualified Significant Wavelet Trees”, in Recent Trends in Multimedia Information Processing, World Scientific, pp. 234-238, 2002.
- [J.6] K. S. Ntalianis, A. D. Doulamis, N. D. Doulamis and S. D. Kollias, “Unsupervised Stereoscopic Video Object Segmentation Based on Active Contours and Retractable Neural Networks”, in Signal Processing, Computational Geometry and Vision, World Scientific and Engineering Academy and Society Press, vol. 1, No. 1, p.p. 287-293, 2002.

- [J.7] N. D. Doulamis, A. D. Doulamis, K. S. Ntalianis, and S. D. Kollias, "An Efficient Fully-Unsupervised Video Object Segmentation Scheme Using an Adaptive Neural Network Classifier Architecture," in *IEEE Transactions on Neural Networks*, Vol. 14(3), pp. 616-630, May 2003.
- [J.8] P. K. Tzouveli, K. S. Ntalianis and S. D. Kollias, "Automatic Videoconference Objects Watermarking Using Object Adapted Qualified Significant Wavelet Trees," in *Lecture Notes in Computer Science*, Springer, p.p. 156-163, 2003.
- [J.9] K. Karpouzis, G. Moschovitis, K. Ntalianis, S. Ioannou, and S. Kollias, "Effective Access to Large Audiovisual Assets Based on User Preferences," in *Multimedia Tools and Applications*, vol. 22, no. 3, pp. 215-234, March 2004.
- [J.10] K. S. Ntalianis, "Multiresolution Organization of Video Content Using an Optimal Interpolation Scheme," in *WSEAS Transactions on Systems*, Vol. 3, no. 10, pp. 3053-3058, December 2004.
- [J.11] K. S. Ntalianis and S. D. Kollias, "An Automatic Stereoscopic Video Objects Multiresolution Cryptographic Scheme Based on Chaos" in *Advances in Intelligent Systems*, IOS Press, vol. 51, p.p. 208-215, 2004.
- [J.12] K. S. Ntalianis, "An Object Adaptive Chaotic Cipher: Increasing the Security of Multimedia Encryption Schemes," in *WSEAS Transactions on Systems*, Vol. 3, no. 10, pp. 3059-3064, December 2004.
- [J.13] K. S. Ntalianis, P. D. Tzouveli, A. S. Drigkas and P. Pintelas, "Automatic Stereoscopic Video Object-Based Watermarking Using Qualified Significant Wavelet Trees," in *Journal of Computer Science & Technology*, accepted for publication, 2007.
- [J.14] K. Raftopoulos, N. Papadakis, K. Ntalianis, and S. Kollias, "Shape-Based Invariant Classification of Gray Scale Images," in *Integrated Computer-Aided Engineering Journal*, Vol. 14, No. 4, Dec. 2007.
- [J.15] K. Ntalianis, A. Doulamis, N. Tsapatsoulis and N. Doulamis, "Human Action Analysis, Annotation and Modelling in Video Streams Based on Implicit User Interaction," in *Multimedia Tools and Applications*, Springer, accepted for publication (on-line version: <http://www.springerlink.com/content/yqw6522g9k17t108/>), 2009.
- [J.16] K. Ntalianis, P. Tzouveli, and S. Kollias, "Protection of Real and Artwork Human Objects based on a Chaotic Moments Modulation Method," in *Journal of Information Assurance and Security*, vol. 4, no. 6, p.p. 509 – 518, 2009.
- [J.17] D. Kouremenos, S-E. Fotinea, E. Efthimiou and K. Ntalianis "A Prototype Greek Text to Greek Sign Language (GSL) Translation System," in *Behaviour & Information Technology Journal*, accepted for publication, 2009.
- [J.18] K. S. Ntalianis and S. D. Kollias, "Unsupervised Segmentation of Stereoscopic Video Objects: Proposal and Investigation of Two Depth-Based Approaches," submitted to the *IEEE Transactions on Circuits and Systems for Video Technology* (**under revision**).
- [J.19] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Watermarking of Human Video Objects based on HU Moments," **submitted** to *Signal Processing: Image Communication*, Elsevier.
- [J.20] K. Ntalianis, N. Tsapatsoulis and A. Drigas, "Video-Object Oriented Biometrics Hiding for User Authentication Over Mobile Networks," **submitted** to *Eurasip Journal on Information Security*.

[J.21] K. Raftopoulos, K. Ntalianis and S. Kollias “Mining User Queries with Markov Chains: Application to On-Line Image Retrieval,” **under major revision** in IEEE Transactions on Knowledge and Data Engineering.

#### *4.5 Conferences (with reviewers)*

[C.1] N. D. Doulamis, A. D. Doulamis, K. S. Ntalianis and S. Kollias, “Intelligent Techniques for Sequence Analysis: Towards Semantic Video Object Segmentation,” in Proceedings of the International Workshop on Image Analysis for Multimedia Interactive Services (WIAMIS’99), Berlin, Germany, June 1999.

[C.2] N. D. Doulamis, A. D. Doulamis, Y. D. Avrithis, K. S. Ntalianis, and S. D. Kollias, ”An Optimal Framework for Summarization of Stereoscopic Video Sequences,” in Proceedings of the International Workshop on Synthetic- Natural Hybrid Coding and Three Dimensional Imaging (IWSNHC3DI’99), Santorini, Greece, September 1999.

[C.3] A. D. Doulamis, N. D. Doulamis, K. S. Ntalianis, and S. D. Kollias, “Unsupervised Semantic Object Segmentation of Stereoscopic Video Sequences,” in Proceedings of the IEEE International Conference on Information, Intelligence and Systems (ICIIS’99), Washington D.C., U.S.A, November 1999.

[C.4] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, “An Active Contour-Based Scheme towards More Semantic Segmentation of Stereoscopic Video Sequences,” in Proceedings of the IEEE International Electromechanical Conference (MELECON’00), Limmasol, Cyprus, May 2000.

[C.5] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, “A Feature Point Based Scheme for Unsupervised Video Object Segmentation in Stereoscopic Video Sequences,” in Proceedings of the IEEE International Conference on Multimedia and Exposition (ICME’00), New York, USA, July 2000.

[C.6] N. D. Doulamis, K. S. Ntalianis, A. D. Doulamis, S. D. Kollias and I. Z. Koukoutsidis, “A Fuzzy Multiple Feature Vector Formulation Scheme Towards Optimal Key Frame Extraction of Stereoscopic Video Sequences,” in Proceedings of the Congress Conference on Artificial Intelligence (CCIA’00), Barcelona, Spain, 2000.

[C.7] A. D. Doulamis, K. S. Ntalianis, N. D. Doulamis, K. Karpouzis and S. D. Kollias, “Unsupervised Tracking of Stereoscopic Video Objects Employing Neural Networks Retraining,” in Proceedings of the Congress Conference on Artificial Intelligence (CCIA’00), Barcelona, Spain, 2000.

[C.8] S. Ioannou, G. Moschovitis, K. S. Ntalianis, K. Karpouzis and S. Kollias, “Effective Access to Large Audiovisual Assets Based on User Preferences,” in Proceedings of the ACM International Conference on Multimedia, Los Angeles, CA, USA, November 2000.

[C.9] N. D. Doulamis, A. D. Doulamis, K. S. Ntalianis, “Optimal Interactive Content-Based Image Retrieval,” in Proceedings of the International Conference on Augmented, Virtual Environments and Three-Dimensional Imaging (ICAV3D’01), Myconos, Greece, 30 May-1 June 2001.

[C.10] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, “Unsupervised VOP Segmentation of Stereo-Captured Video Sequences,” in Proceedings of the International Conference on Augmented, Virtual Environments and Three-Dimensional Imaging (ICAV3D’01), Myconos, Greece, 30 May-1 June 2001.

- [C.11] A. D. Doulamis, K. S. Ntalianis, N. D. Doulamis, and S. D. Kollias, "Adaptable Neural Networks for Unsupervised Content-based Video Object Segmentation," in Proceeding of the International Conference on Artificial Neural Networks (ICANN'01), Vienna, Austria, 21-25 August, 2001.
- [C.12] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis, G. Patikis, and S. D. Kollias, "An Efficient Scheme for Automatic VOP-Based Organization of Stereo-Captured Video Sequences," in Proceedings of the International Workshop of Image Analysis for Multimedia Interactive Systems (WIAMIS'01), Tampere, Finland, 16-17 May, 2001.
- [C.13] K. S. Ntalianis, A. D. Doulamis, N. D. Doulamis, and S. D. Kollias, "Non-Sequential Video Structuring based on Video Object Linking: An Efficient Tool for Video Browsing and Indexing," in Proceedings of the IEEE International Conference on Image Processing (ICIP'01), Thessaloniki, Greece, October 2001.
- [C.14] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis, and S. D. Kollias, "Tube-Embodied Gradient Vector Flow Fields for Unsupervised Video Object Plane (VOP) Segmentation," in Proceedings of the IEEE International Conference on Image Processing (ICIP'01), Thessaloniki, Greece, October 2001.
- [C.15] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis, and S. D. Kollias, "Automatic Content-based Organization of Video Sequences for Multimedia Applications," in Proceedings of the IEEE International Conference on Multimedia and Exposition (ICME'01), Tokyo, Japan, August 2001.
- [C.16] K. S. Ntalianis, A. D. Doulamis, N. D. Doulamis, and S. D. Kollias, "Multiresolution GVF field: A Fast Implementation Towards VOP Segmentation," in Proceedings of the IEEE International Conference on Multimedia and Exposition (ICME'01), Tokyo, Japan, August 2001.
- [C.17] K. S. Ntalianis, S. Ioannou, K. Karpouzis, G. Moschovitis and S. Kollias, "Visual Information Retrieval from Annotated Large Audiovisual Assets Based on User Profiling and Collaborative Recommendations," in Proceedings of the IEEE International Conference on Multimedia and Exposition (ICME'01), Tokyo, Japan, 22-25 August 2001.
- [C.18] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis, I. Z. Koukoutsidis and S. D. Kollias, "A Multiscale Tree-Structure for Fast Browsing and Effective Transmission of Video Files," in Proceedings of the IEEE International Workshop on Multimedia Signal Processing (MMSp'01), Cannes, France, October 2001.
- [C.19] K. S. Ntalianis, A. D. Doulamis and N. D. Doulamis, "Unsupervised Stereoscopic Video Object Segmentation based on Active Contours and Retractable Neural Networks," in Proceedings of the International Conference on Very-Low Bit-Rate Video (VLBV'01), Athens, Greece, October 2001.
- [C.20] N. D. Doulamis, A. D. Doulamis, K. S. Ntalianis, and S. D. Kollias, "Hierarchical Content Organization of Video Files for Interactive Video Transmission and Navigation over Internet," in Proceedings of the IEEE International Conference on Multimedia Technology and Applications (MTAC'01), Irvine, California, USA, November 2001.
- [C.21] K. S. Ntalianis, A. D. Doulamis, N. D. Doulamis and S. D. Kollias "Unsupervised Video Object Segmentation of Stereoscopic Video Sequences Using Depth Information and Multiresolution Gradient Vector Flow Fields," in Proceedings of the IEEE International Conference on Multimedia Technology and Applications (MTAC'01), California, USA, November 2001.
- [C.22] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, "Automatic Stereoscopic Video Object-Based Watermarking Using Qualified Significant Wavelet Trees," in Proceedings of the IEEE International Conference on Consumer Electronics (ICCE'02), L.A, USA, June 2002.

- [C.23] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, "Neural Networks Retraining for Unsupervised Video Object Segmentation of Videoconference Sequences," in Proceedings of the International Conference on Artificial Neural Networks (ICANN'02), Madrid, Spain, August 2002.
- [C.24] K. S. Ntalianis, A. D. Doulamis, N. D. Doulamis and S. D. Kollias, "Information Fusion Versus Active Contours for Unsupervised Stereoscopic Video Objects Segmentation," in Proceedings of the IEEE International Conference on Digital Signal Processing (DSP'02), Santorini, Greece, July 2002.
- [C.25] N. D. Doulamis, A. D. Doulamis and K. S. Ntalianis, "Adaptive Classification-Based Articulation and Tracking of Video Objects Employing Neural Network Retraining," in Proceedings of the IEEE International Conference on Digital Signal Processing (DSP'02), Santorini, Greece, July 2002.
- [C.26] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, "Video Object Articulation Using Depth-Based Content Segmentation Approaches," in Proceedings of the IEEE International Conference on Image Processing (ICIP'02), Rochester, USA, September 2002.
- [C.27] K. S. Ntalianis, A. D. Doulamis, N. D. Doulamis and S. D. Kollias, "An Automatic Scheme for Stereoscopic Video Object Watermarking in the Wavelet Domain," in Proceedings of the IEEE International Conference on Image Processing (ICIP'02), Rochester, USA, September 2002.
- [C.28] K. S. Ntalianis, A. D. Doulamis, N. D. Doulamis and S. D. Kollias, "A Robust Steganographic Wavelet-Based System for Resistant Message Hiding Under Error Prone Networks," in Proceedings of the IEEE International Conference on Multimedia and Exposition (ICME'02), Lausanne, Switzerland, August 2002.
- [C.29] N. D. Doulamis, A. D. Doulamis and K. S. Ntalianis, "An Optimal Interpolation-based Scheme for Video Summarization," in Proceedings of the IEEE International Conference on Multimedia and Exposition (ICME'02), Lausanne, Switzerland, August 2002.
- [C.30] K. S. Ntalianis, N. D. Doulamis, A. D. Doulamis and S. D. Kollias, "An Automatic Video-Object Based Steganographic System for Multi-Use Message Hiding Using Wavelet Transform," in Proceedings of the IEEE International Conference on Systems, Man and Cybernetics (SMC'02), Hammamet, Tunisia, October 2002.
- [C.31] N. D. Doulamis, A. D. Doulamis and K. S. Ntalianis, "Recursive Non-Linear Autoregressive Models (RNAR): Application to Traffic Prediction of MPEG Video Sources," in Proceedings of the Eurasp XI European Signal Processing Conference (EUSIPCO'02), Toulouse, France, September 2002.
- [C.32] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Security of Human Video Objects by Incorporating a Chaos-Based Feedback Cryptographic Scheme", in Proceedings of the ACM International Conference on Multimedia, New York, NY, USA, October 2004.
- [C.33] K. S. Ntalianis and S. D. Kollias, "Chaotic Video Objects Encryption Based on Mixed Feedback, Multiresolution Decomposition and Time-Variant S-Boxes," in Proceedings of the IEEE International Conference on Image Processing (ICIP'05), Genova, Italy, September 2005.
- [C.34] K. S. Ntalianis and S. D. Kollias "An Optimized Key-Frames Extraction Scheme Based on SVD and Correlation Minimization," in Proceedings of the IEEE International Conference on Multimedia and Exposition (ICME'05), Amsterdam, The Netherlands, July 2005.
- [C.35] K. S. Ntalianis, "An Automatic Human Video Objects Encryption Scheme Built on Stream and Block Ciphers and Based on Chaos," in Proceedings of the WSEAS International Conference on Systems, Athens, Greece, July 2005.

- [C.36] K. S. Ntalianis, "A Short-Message Robust Steganographic Method for Effective Information Recovery Under Transmission Losses of Cellular Networks," in Proceedings of the WSEAS International Conference on Systems, Athens, Greece, July 2005.
- [C.37] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Human Video Object Watermarking Based on HU Moments," in Proceedings of the IEEE Workshop on Signal Processing Systems (SIPS'05), Athens, Greece, November 2005.
- [C.38] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Robust Content-Based Watermarking: HU versus Zernike Moments," in Proceedings of the International Workshop on Very Low Bit-Rate Video (VLBV'05), Sardinia, Italy, September 2005.
- [C.39] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Human Face Watermarking based on Zernike Moments," in Proceedings of the IEEE Symposium on Signal Processing and Information Technology (ISSPIT'05), Athens, Greece, December 2005.
- [C.40] K. S. Ntalianis, and S. D. Kollias, "An Automatic Video Objects Encryption Scheme Built on Stream and Block Ciphers and Based on Chaos," in Proceedings of the International Conference on Intelligent Systems (ICIS'05), Kuala Lumpur, Malaysia, December 2005.
- [C.41] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Chaotic Encryption Driven Watermarking of Human Video Objects Based on Hu Moments," in Proceedings of the IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI'06), Athens, Greece, June 2006.
- [C.42] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Confronting the Synchronization Problem of Semantic Regions Under Geometric Attacks," in proceedings of the IEEE International Conference on Multimedia and Exposition (ICME'06), Toronto, Canada, July 2006.
- [C.43] K. Raftopoulos, N. Papadakis and K. S. Ntalianis, "Visual pathways for landmark detection," in Proceedings of the International Conference on Artificial Neural Networks (ICANN'06), Athens, Greece, September 2006.
- [C.44] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Video Object Watermarking Using Hu Moments," in Proceedings of the International Conference on Systems, Signals and Image Processing (IWSSIP'06), Budapest, Hungary, September 2006.
- [C.45] K. S. Ntalianis, and S. D. Kollias, "Optimal Multiscale Organization of Multimedia Content for Fast Browsing and Cost-Effective Transmission," in proceedings of the WSEAS International Conference on Signal Processing, Robotics and Automation (ISPRA'07), Corfu, Greece, February 2007.
- [C.46] K. Raftopoulos; N. Papadakis, K. Ntalianis and S. Kollias, "Semantic clustering of information systems' users with stochastic techniques," in Proceedings of the IEEE International Conference on Semantic Computing (ICSC 2007), Los Angeles, USA, September 2007.
- [C.47] M. Athanasaki, M. Avramouli, K. Karpouzis, K. Ntalianis, S. Kollias, F. Sala, A. Schmidt and A. Symvonis, "AGENT-DYSL: A Novel Intelligent Reading System for Dyslexic Learners," in Proceedings of the eChallenges 2007 Conference, The Hague, Netherlands, October 2007.
- [C.48] P. K. Tzouveli, K. S. Ntalianis, and S. D. Kollias, "Semantic Region Protection Using Hu Moments and a Chaotic Pseudo-random Number Generator," in Proceedings of the International Workshop on Computational Intelligence in Security for Information Systems, Genoa, Italy, October 2008.

- [C.49] K. Raftopoulos, P. K. Tzouveli, K. S. Ntalianis, S. D. Kollias, D. Kalomoirakis, N. Fyssas and G. Foukaneli, "Saint Classification in Byzantine Art," in Proceedings of the 14th International Conference on Virtual Systems and MultiMedia (VSMM), Limassol, Cyprus, October 2008.
- [C.50] N. Papadakis, K. S. Ntalianis, A. Doulamis and G. Stamoulis, "An Automatic Multi-Agent Web Image and Associated Keywords Retrieval System," in Proceedings of the 16th IEEE International Workshop on Systems, Signals and Image Processing (IWSSIP), Halkida, Greece, June 2009.
- [C.51] N. Doulamis and K. S. Ntalianis, "On the Fly Semantic Annotation and Modelling of Multimedia," in Proceedings of the 16th IEEE International Workshop on Systems, Signals and Image Processing (IWSSIP), Halkida, Greece, June 2009.
- [C.52] K. S. Ntalianis, A. Doulamis, N. Tsapatsoulis and N. Doulamis, "Unsupervised Clustering of Clickthrough Data for Automatic Annotation of Multimedia Content," to appear in Proceedings of the 19th International Conference on Artificial Neural Networks (ICANN), Limassol, Cyprus, September 2009.
- [C.53] P. Delias, K. S. Ntalianis, A. Doulamis and N. Matsatsinis, "Automating Marketing Campaign Management Through an Agent-based Workflow Management System," in Proceedings of the 13th WSEAS International Conference on Computers, Rhodes, Greece, p.p. 37-45, July 2009.
- [C.54] K. Ntalianis, "A system of intelligent agents for offering integrated knowledge-based services to mobility impaired people," *Electronic Learning and Special Needs*, Athens, November 2004.
- [C.55] P. Tzouveli, K. Ntalianis, S. Kollias, A. Symvonis, "An intelligent and adaptive reading system for persons with learning difficulties," *4th Pan-Hellenic Conference of teachers for ICT focusing on the Exploitation of Information and Communication Technologies for teaching*, Syros, May 2007.
- [C.56] P. Tzouveli, E. Mitropoulou, K. Ntalianis, S. Kollias, A. Symvonis, "Designing AGENT-DYSL: a sophisticated reading system for persons with learning difficulties," *11<sup>th</sup> Conference of the Pan-Hellenic Association of Logopaedics*, Athens, November 2007.
- [C.57] K. Ntalianis, N. Tsapatsoulis and A. Drigas, "Video-Object Oriented Biometrics Hiding for User Authentication Over Mobile Networks," to appear in Proceedings of the *COST 2101 Workshop on Privacy and Security for Biometrics*, Las Palmas, Canary Islands, May 2010.

#### ***4.6 Publication in International Conferences after Invitation***

- [IC.1] K. S. Ntalianis, N. Tsapatsoulis, A. Doulamis and N. Doulamis, "Event Recognition in Video Streams based on User Cognition," to appear in Proceedings of the 1st ACM International Workshop in Analysis and Retrieval of Events/Actions and Workflows in Video Streams (AREA 2008), Vancouver, Canada, October 2008.
- [IC.2] K. S. Ntalianis, N. Tsapatsoulis, A. Doulamis and N. Doulamis, "Automatic Annotation of Multimedia Content by User Clickthroughs: Enhancing the Performance of Multimedia Search Engines," to appear in Proceedings of the 10th WSEAS International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems (MAMECTIS '08), Corfu, Greece, October 2008.
- [IC.3] N. Tsapatsoulis and K. S. Ntalianis, "Semantic Image Annotation via Hierarchical Classification," to appear in Proceedings of the 10th WSEAS International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems (MAMECTIS '08), Corfu, Greece, October 2008.

[IC.4] A. Doulamis and K. S. Ntalianis, "PIDALION: A Reconfigurable Agent-based Multimedia Search Engine Platform," to appear in Proceedings of the 10th WSEAS International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems (MAMECTIS '08), Corfu, Greece, October 2008.

#### ***4.7 Other Writing Activities***

##### **Research Proposals**

In the following I cite the research proposals that I was a co-author. In proposals [PR.7], [PR.8], [PR.9], [PR.13], [PR.14], [PR.16], [PR.17], [PR.18] and [PR.20] I was the principal author, having also the organization and management responsibilities of writing of the proposals. In the rest of the proposals I was a regular author of the writing team.

- [PR.1] Framework: Legal Entity. Title: Digital Archiving of Audiovisual Data From the Ministry of Press and Mass Media (GGTP). Co-authors (members of): IVML. Year of Writing: 1998.
- [PR.2] Framework: EPET II. Title: An Intelligent System for Retrieval and Mining of Audiovisual Material (PANORAMA). Co-authors (members of): IVML, ITI-AUTH, UCrete, ERT, Greek Film Archive, Systema Ltd, Unibrain SA, Mangos, Leo Burnett SA, Doukas School. Year of Writing: 1998.
- [PR.3] Framework: IST. Title: Modular Hybrid Artefacts with Adaptive Functionality (ORESTEIA). Co-authors (members of): IVML, ALTEC S.A., ST Microelectronics Italy S.A., University of Milan, Kings College of London, Imperial College. Year of Writing: 2000.
- [PR.4] Framework: IST. Title: Unified Intelligent Access to Heterogeneous Audiovisual Content (FAETHON). Co-authors (members of): IVML, Sysware SA, Lambrakis Research Foundation, Joanneum Research, Film Archiv Austria, Starlab Research NV/SA, Oracle GmbH, Hellenic Broadcasting Corp.. Year of Writing: 2000.
- [PR.5] Framework: Leonardo. Title: TeleInformatics System for Continuous Collection, Processing, Diffusion of Material for Teacher Training in Special Education (SPERO). Co-authors (members of): IVML, Kapodistrian University of Athens, County Council of Viborg, Iceland University of Education, Glasgow Caledonian University, Centro De Profesores y Recursos de Gijon. Year of Writing: 2001.
- [PR.6] Framework: PENED. Title: Semantic Analysis of Multimedia Using Knowledge Technologies (ONTOMEDIA). Co-authors (members of): IVML, Aristotle University of Thessaloniki, Centre for Research and Technology Hellas, Cinegram S.A.. Year of Writing: 2002.
- [PR.7] Framework: EQUAL. Title: TELEWORK FOR ALL (TELEWORK4ALL). Co-authors (members of): IVML, EWORX A.E, ERGOMAN A.E, M LEVIS A.E., Telepassport A.E., E.V.E.A., Prefecture of Thessaloniki, Foundation of Social Work, DISSABILITY NOW, National Foundation of Youth, Institute of Educational Studies and Research (I.E.M.E.). Year of Writing: 2004.



- [PR.8] Framework: FP6. Title: Accommodative Intelligent Educational Environments for Dyslexic Learners (AGENT-DYSL). Co-authors (members of): IVML, ATOS Origin SAE, The Dyslexia Institute UK, Herning Kommune, Børn og Unge, Forschungszentrum Informatik, Institute of Language and Speech Processing, Centro De Profesores y Recursos de Gijon, Glasgow Caledonian University, ZENON Automation Technologies. Year of Writing: 2005.
- [PR.9] Framework: Information Society. Title: Spatiotemporal Modeling of Standing, Full-Length and Dimidiated Figures in Works of Art, by Retrieval of Proportions, based on the Monuments of the Foundation of the Holy Monastery of Mount Sinai (MORFES). Co-authors (members of): IVML, Foundation of the Holy Monastery of Mount Sinai, European Dynamics, NCSR DEMOKRITOS. Year of Writing: 2005.
- [PR.10] Framework: Information Society. Title: Integrated Pilot System of Early Notification and Fast Estimation of Damages in the Event of Earthquake in Attiki (HERMES). Co-authors (members of): Kapodistrian University of Athens, Teletel A.E., Space Hellas A.E.. Year of Writing: 2005.
- [PR.11] Framework: Information Society. Title: Development of a Stereoscopic Projection System and of Sophisticated Algorithms for Enhanced 3D Visualization by the Home Entertainment System. (TRIOPSIS). Co-authors (members of): Ellemedia Technologies, NOUS. Year of Writing: 2005.
- [PR.12] Framework: RPF– Program of Scientific Collaboration with Distinguished Scientists from Abroad. Title: Digitization of AudioVisual Content and Extraction, Mining and Management καὶ of Multimedia Metadata based on MPEG standards (PSIFIORIKSI). Co-authors (members of): SignalGenerix Ltd. Year of Writing: 2006.
- [PR.13] Framework: FP7. Title: PROtection of Citizens, Infrastructures and the Environment from MaLIcious OPERations and ActS of TerrorISm on ADR CargoS (PROLIPSIS). Co-authors (members of): Centre for Research and Technology Hellas/ Hellenic Institute of Transport, Volvo Technology AB, Kingston Computer Consultancy Ltd., ZENON, University of Cyprus, Planung Transport Verkehr AG, Uniman S.A., Raddnings Verket (Swedish Rescue Services Agency), University of Peloponnese. Year of Writing: 2007.
- [PR.14] Framework: FP7. Title: On the FLY Semantic Annotation and Modelling of MultimEdia Content: ENhancinG the CapabilitIes of Search EngiNES (FLYSENGINES). Co-authors (members of): ATOS Origin, Technical University of Crete, Forschungszentrum Informatik, Cyprus University of Technology, Alinari 24 ORE spa, ZENON Automation Technologies, DIAS Publishing House Ltd, Coventry University. Year of Writing: 2008.
- [PR.15] Framework: RPF– DESMI 2008 – Information and Communication Technologies. Title: Multimodal Analysis Based on Structured Knowledge Representation for Automatic Annotation of News (POLISIMANSI). Co-authors (members of): CUT, SignalGenerix Ltd, Dias Publishing House Ltd. Year of Writing: 2008.

- [PR.16] Framework: RPF– DESMI 2008 – Recruitment of New Researcher from Abroad. Title: An Integrated System for Intelligent Access and Search of Multimedia Content. Co-authors (members of): CUT. Year of Writing: 2008.
- [PR.17] Framework: FP7. Title: “An Open Collaborative M-CDN Architecture for Massive Multiplayer Online Role-Playing In-Home Game Experience (MATRIX)”. Co-authors (members of): Intracom S. A. Telecom Solutions, Research and Education Laboratory in Information Technologies, Centre for Research and Technology Hellas, German Research Center for Artificial Intelligence, Trivisio Prototyping GmbH, Asociación Multisectorial de Empresas Españolas de Electrónica y Comunicaciones, IRISMEDIA S. L. U., University of Westminster, Cyprus University of Technology. Year of Writing: 2009.
- [PR.18] Framework: RPF– DESMI 2009 – Didaktor. Title: Multimedia Syndication for Enhanced News Feeds over Limited Resource Networks. Co-authors (members of): Cyprus University of Technology. Year of Writing: 2009
- [PR.19] Framework: NATIONAL RANGE ACTION - Collaboration. Title: Determination of markers for the early application of transfusion and chelation therapy in patients with beta thalassemia intermedia. Co-authors (members of): Department of Medicine of the University of Athens, NCSR DEMOKRITOS, ORTHOVIOTIKI MEDICINE, PLEGMA, Year of Writing: 2009.
- [PR.20] Framework: Interreg – Interregional Collaboration Greece-Cyprus. Title: Implementation of an intelligent system for surveillance of the seashore, using camera-banks and sensor networks. Co-authors (members of): Cyprus University of Technology, Technical University of Crete, University of Aegean, Cyprus Police. Year of Writing: 2009.
- [PR.21] Framework: PEOPLE (MARIE CURIE ACTION) - Initial Training Networks. Title: Personal Informatics for Emotional Wellbeing. Co-authors (members of): Lancaster University, Stockholm University, University of Newcastle, Eindhoven Univ. Technology, Copenhagen Business School, National University of Ireland Maynooth, Transylvania University, Dublin City University, World Scientific and Engineering Academy and Society, Philips Research, PlayGen, ROPARDO. Year of Writing: 2009.
- [PR.22] Framework : Education and Life-Long Learning – Programme «THALIS». Title: Estimation of the expression of the Survivin gene in the blood of patients suffering from lung or breast cancer and association to their clinical progress. Co-authors (members of): Department of Medicine of the University of Athens, Department of Medicine of the University of Ioannina, Center for Biomedical Research and Technology. Year of Writing: 2010.

## **Project Deliverables**

At the time of writing this CV I have participated in the writing of more than 45 deliverables in the framework of several different research and development project. An analytical list follows.

- [DL.1]Title: Databank for Special Education Schools. Number of Deliverables: 2. Years of Writing: 1998 -2000.
- [DL.2]Title: Digital Archiving of Audiovisual Data From the Ministry of Press and Mass Media. Number of Deliverables: 2. Years of Writing: 1999 -2000.
- [DL.3]Title: An Intelligent System for Retrieval and Mining of Audiovisual Material. Number of Deliverables: 3. Years of Writing: 1999 -2001.
- [DL.4]Title: A Distributed System for Visual Surveillance and Intrusion Detection. Number of Deliverables: 2. Years of Writing: 2000 -2001.
- [DL.5]Title: Modular Hybrid Artefacts with Adaptive Functionality. Number of Deliverables: 3. Years of Writing: 2001 -2003.
- [DL.6]Title: Unified Intelligent Access to Heterogeneous Audiovisual Content. Number of Deliverables: 4. Years of Writing: 2001 -2003.
- [DL.7]Title: TeleInformatics System for Continuous Collection, Processing, Diffusion of Material for Teacher Training in Special Education. Number of Deliverables: 2. Years of Writing: 2002, 2004.
- [DL.8]Title: Ambient Intelligence System of Agents for Knowledge-based and Integrated Services for Mobility Impaired Users. Number of Deliverables: 2. Years of Writing: 2004 - 2005.
- [DL.9]Title: Multimedia Semantic Syndication for Enhanced News Services. Number of Deliverables: 4. Years of Writing: 2006 - 2007.
- [DL.10]Title: Accommodative Intelligent Educational Environments for Dyslexic Learners. Number of Deliverables: 6. Years of Writing: 2006 - 2008.
- [DL.11]Title: Spatiotemporal Modeling of Standing, Full-Length and Dimidiated Figures in Works of Art, by Retrieval of Proportions, based on the Monuments of the Foundation of the Holy Monastery of Mount Sinai. Number of Deliverables: 8. Years of Writing: 2006 - 2008.
- [DL.12]Title: Development of a System for Management and Sophisticated Access to Scientific Data and Annotation Metadata of Byzantine Works of Art, Using Intelligent Tools for Ontology Classification, Indexing, Retrieval-Mining and Visualization of Content. Number of Deliverables: 6. Years of Writing: 2006 - 2008.
- [DL.13]Title: Digitization of AudioVisual Content and Extraction, Mining and Management κα of Multimedia Metadata based on MPEG standards. Number of Deliverables: 5. Years of Writing: 2006 - 2008.

## **5. Reviewer of International Journals and Conferences, Member of Scientific Committees**

### ***5.1 Scientific Journals***

- IEEE Transactions on Image Processing, (Reviewer)
- IEEE Transactions on Multimedia, (Reviewer)
- IEEE Transactions on Neural Networks, (Reviewer)
- Signal Processing Journal, (Reviewer)
- Pattern Analysis and Applications (Reviewer)
- International Journal of Informatica (Reviewer)
- Neural Networks (Elsevier) (Reviewer)
- WSEAS Transactions on Systems (Reviewer)
- WSEAS Transactions on Signal Processing (Reviewer)
- International Journal of Neural Systems (Reviewer)
- Neurocomputing (Reviewer)

### ***5.2 International Conferences***

- IEEE International Conference on Information Intelligence and Systems, (Reviewer)
- International Conference on Very Low Bit Rate Video (Reviewer και μέλος της οργανωτικής επιτροπής το 2001),
- International Conference on Artificial Neural Networks (Reviewer και μέλος της οργανωτικής επιτροπής το 2006),
- IEEE International Conference on Image Processing, (Reviewer)
- IEEE International Conference on Multimedia and Exposition (Reviewer)
- WSEAS International Conference on Non-Linear Analysis, Non-Linear Systems and Chaos (Reviewer)
- WSEAS International Conference on Educational Technologies (Reviewer και μέλος της επιστημονικής επιτροπής το 2006)
- International Symposium on Visual Computing (Reviewer και μέλος της επιστημονικής επιτροπής από το 2006).
- 3DTV Conference (Reviewer, 2006 - )
- ACM International Workshop in Analysis and Retrieval of Events/Actions and Workflows in Video Streams (Reviewer and Session Chairman, 2008)

## 6. Participation in committees, work groups and administrative positions

### 6.1 Supervision of Diploma and PhD Theses

- PhD Thesis of Gabriel Tsechpenakis in the scientific area of semantic segmentation of images and video (NTUA – November 1999 – June 2003).
- Diploma Thesis of Spyros Vlahos entitled “Development of an integrated system for content based image retrieval ” (NTUA – January 2001 - September 2001).
- PhD Thesis of Paraskevi Tzouveli in the scientific areas of intellectual property protection, restricted access to multimedia files and e-learning technologies (NTUA. – November 2001 – December 2009).
- Diploma Thesis of Ioannis Dramis entitled “The multimedia standard MPEG-21: Transparent and complementary use of multimedia resources among heterogeneous networks, for efficient delivery and consumption of multimedia content” (NTUA - February 2002 – July 2002).
- PhD Thesis of Dimitrios Kouremenos in the scientific areas of Human-Computer Interaction and intelligent sign language systems (NTUA. – November 2005 – ).
- PhD Thesis of Constantinos Raftopoulos in the scientific areas of Human-Computer Interaction on the Internet and of content analysis techniques based on shape (NTUA. – November 2006 – ).
- Diploma Thesis of Zaharias Pavlos entitled “Modeling and Automatic Extraction of Figures in Byzantine Hagiography based on the Specification of Dionysios from Fournas and the Metrics of Panselinos” (NTUA – February 2007 – ).
- Diploma Thesis of Apostolos Kostakis entitled “Comparison of Color and Texture Algorithms for Analyzing and Describing Multimedia Content” (University of Peloponnese – November 2008 – October 2009).
- Diploma Thesis of Eleftherios Xanthoudakis entitled “Content Retrieval based on Hybrid Schemes According to MPEG-7 Descriptors” (University of Peloponnese – November 2008 – October 2009).
- Diploma Thesis of Ioanna Lalagianni entitled “Contemporary Image and Video Watermarking Techniques” (University of Peloponnese – March 2009 – ).

## 7. Prizes / Awards (Postgraduate Studies)

ORGANIZATION	YEAR	DISTINCTION
Institute of Communication and Computer Systems – National Technical University of Athens	1999	1-year Scholarship as one of the Best Ph.D entrants in the Electrical and Computer Engineering Department of NTUA

State Scholarships Foundation	1999-2002	3-year Scholarship to the Best Ph.D student in Greece focusing on Digital Signal Processing
Thomaidion Foundation	2002	Paper grant and award to a published paper as one of the Best Published Papers of NTUA during 2001.
Chorafas Foundation	2002	Research grant and award to the best 4 young researchers of the NTUA
Thomaidion Foundation	2003	Paper grant and award to a published paper as one of the Best Published Papers of NTUA during 2002
National Technical University of Athens	2003	Grant and award to the Best PhD Thesis of NTUA, completed within 2002
Panhellenic Federation of Large Families	2003	Grant and award for being a member of a large family and completing PhD within 2002
State Scholarships Foundation	2005	18-month Postdoctoral Scholarship in the field of Computer Science

## 8. Citations

Total number of citations: **more than 250** (May 2010)

Source: <http://scholar.google.gr/>