

CV

Georgios A Triantafyllidis

Associate Professor

Department of Architecture, Design and Media Technology

Medialogy Section, Lighting Design

Aalborg University Copenhagen

A.C. Meyers Vænge 15

Room: B4, 2450 København SV, DK

Phone: +45 9940 2622

email: gt@create.aau.dk

Personal Information

Date of birth:	5 March 1975
Place of birth:	Thessaloniki, Greece
Marital status:	Married with three children

Education

November 2002:

PhD in electrical and computer engineering of the Aristotle University of Thessaloniki, Greece. PhD title: "Coding, Processing and enhancement of images and image sequence of two and three dimensions".

December 1997:

Electrical Engineering diploma of the Aristotle University of Thessaloniki, Greece. Grade 9/10. Characterization: Excellent (class rank 3%). Specialization in Telecommunications. Title of diploma thesis: "Multiresolution analysis of sound and images".

Professional Appointments

2015-now	Associate Professor – Medialogy Section, Department of Architecture, Design and Media Technology, Aalborg University, Copenhagen, Denmark
2012-2015	Adjunct Professor – Medialogy Section, Department of Architecture, Design and Media Technology, Aalborg University, Copenhagen, Denmark
2008-2012	Assistant Professor on Digital Image processing - Informatics Engineering Dept, Technological Educational Institute, Heraklion, Greece.
2005-2008	Visiting Professor – Electrical & Computer Eng Dept, Aristotle University, Thessaloniki, Greece.
2004-2008	Researcher D (Lecturer) - Informatics & Telematics Institute, Centre for Research and Technology Hellas (ITI-CERTH), Thessaloniki, Greece.
2000-2004	Senior Researcher - Informatics & Telematics Institute, Centre for Research and Technology Hellas (ITI-CERTH), Thessaloniki, Greece.
1996-2000	Research associate - Information Processing Lab, Computer and Electrical Eng Dept., Aristotle University, Thessaloniki, Greece.

Research Interests

2D and 3D Image and Video Analysis and Processing, Computer Vision

Object detection and recognition, Image semantics, Image retrieval and enhancement, Machine learning, Context based image coding, 3D coding, 3DTV, Free-view TV, Stereoscopic imaging, Watermarking

Signal Processing and Multimodal Systems

Digital signal analysis, Multimodal sensing, Sensor based data fusion, Applications

Natural User Interfaces

Depth cameras, Perception, Reactive systems, Serious games, Interactive media

Intelligent Lighting systems

Interactive design, Connected lighting, Human computer interaction

Teaching Experience

1999 Summer Semester
2000 Summer Semester
2001 Summer Semester
2002 Summer Semester

Teaching assistance in **“Digital Filters”** (fourth year course) at Electrical and Computer Engineering Dept of the Aristotle University of Thessaloniki, Greece.

- Digital Signal Processing Introduction, Z Transform, Fourier Transform, DFT, FFT
- IIR and FIR filters – digital filter design
- 2D signal processing
- Stability of digital filters
- Wavelets, Filter banks
- Time series theory

1998 Winter Semester
1999 Summer Semester

Teaching (visiting teacher) in **“Sound Synthesis and Processing”** and **“Theory of Sound”** at the State Institute for Occupational Preparation, Thessaloniki, Greece.

- Sound processing basics
- Audio signal analysis and processing
- Sound filtering
- Audio features and matching

2004 Summer Semester
2005 Summer Semester
2006 Summer Semester
2007 Summer Semester

Teaching (visiting professor) in **“Medical Image Coding and Processing”** at Medical Informatics Postgraduate Program of the Aristotle University of Thessaloniki, Greece

- Image and video compression formats
- Types and features of medical images
- Medical images processing
- Feature detection and recognition. Segmentation and analysis of medical images
- 3D medical imaging

2005 Winter Semester
2006 Winter Semester
2007 Winter Semester

Teaching (visiting professor) in **“Computer Systems”** at Electrical and Computer Engineering Dept of the Aristotle University of Thessaloniki, Greece

- Computer hardware introduction
- Operating Systems architecture
- Computational systems
- Introduction in network systems

2006 Summer Semester
2007 Summer Semester

Teaching (visiting professor) in **“Computer Architecture”** at Electrical and Computer Engineering Dept of the Aristotle University of Thessaloniki, Greece

- Digital logic level
- Instruction set architecture
- Microarchitecture
- System design

2008 Winter Semester

Teaching (visiting professor) in **“Structured Programming”** at Electrical and Computer Engineering Dept of the Aristotle University of Thessaloniki, Greece

- Programming basics
- Compilers
- C/C++

2009 Summer Semester
2010 Summer Semester
2011 Summer Semester
2012 Summer Semester

Teaching (assistant professor) in **“Artificial Intelligence – Experts Systems”** at Informatics Engineering Dept of the Technological Educational Institute of Crete, Greece

- Systems intelligence, toy problems
- Graph and tree search algorithms
- Genetic algorithms
- Semantic data analysis and knowledge representation
- Machine learning, data mining

- Agents and ontologies

2009 Winter Semester
2010 Winter Semester
2011 Winter Semester

Teaching (assistant professor) in “**Digital Image Processing**” at Informatics Engineering Dept of the Technological Educational Institute of Crete, Greece

- Digital image processing and analysis
- Image compression and coding techniques
- 3d Imaging and applications
- Image and video semantic analysis
- Feature detection
- Object and activity recognition

2010 Winter Semester
2011 Winter Semester

Teaching (assistant professor) in “**Introduction to Informatics**” at Informatics Engineering Dept of the Technological Educational Institute of Crete, Greece

- Software development
- Programming basics
- Operating systems
- Network and applications

2010 Summer Semester
2011 Summer Semester
2012 Summer Semester

Teaching (assistant professor) in “**Computer Graphics**” at Informatics Engineering Dept of the Technological Educational Institute of Crete, Greece

- Transformations
- Lighting
- Texturing
- Rendering and animation
- 2d and 3d graphics
- OpenGL and XNA

2012 Winter Semester
2013 Winter Semester
2014 Winter Semester

Teaching (adjunct professor) in “**Image Processing**” at Medialogy Section ADMT dept, Aalborg University, Denmark

- Digital images
- Point processing
- Colors
- Morphological Filtering
- Image analysis
- Image processing in the frequency domain

2013 Winter Semester

Teaching (adjunct professor) in “**Procedural Programming**” at Service System Design Master, ADMT dept, Aalborg University, Denmark

- Introduction to multimedia
- Playing Sound, Images, Animation and Video in Processing
- Interactivity in Processing
- Exploring the Android mode of Processing
- Network programming with Processing
- Augmented reality with processing

2013 Summer Semester
2014 Summer Semester
2015 Summer Semester
2016 Summer Semester

Teaching (adjunct/associate professor) in “**Multimedia Programming**” at Medialogy Master at Medialogy Section ADMT dept, Aalborg University, Denmark

- Introduction to multimedia
- Interactive multimedia
- Android development
- Multiplayer and networking
- Augmented reality
- Embedded programming

2013 Winter Semester

Teaching (adjunct professor) in “**Procedural programming**” at Service Systems Design Master, Medialogy Section ADMT dept, Aalborg University, Denmark

- Introduction to Programming
- Processing programming language
- 3D and graphics in processing
- AR and Android Mode in Processing
- APIs in Processing

2013 Summer Semester	Teaching (adjunct professor) in “ Foundations in Computer Graphics ” at Master’s level at Medialogy Section ADMT dept, Aalborg University, Denmark
2014 Summer Semester	
2015 Summer Semester	
	<ul style="list-style-type: none"> – Introduction in computer graphics research – Topics in computer graphics – Advanced work on a student-selected specialization
2013 Summer Semester	Teaching (adjunct professor) in “ Foundations in Light Design ” at Master’s level at Medialogy Section ADMT dept, Aalborg University, Denmark
	<ul style="list-style-type: none"> – Introduction in light design research – Topics in light design – Advanced work on a student-selected specialization
2014 Winter Semester	Teaching (adjunct/associate professor) in “ Rendered Light Simulation ” at Lighting Design Master’s level at Medialogy Section ADMT dept, Aalborg University, Denmark
2015 Winter Semester	
2016 Winter Semester	
	<ul style="list-style-type: none"> – Introduction in light design research – Light in computer graphics – Ray tracing, advanced rendering – Light-matter interaction – HDR, mapping, virtual cameras
2015 Summer Semester	Teaching ((adjunct/associate professor)) in “ Intelligent Lighting Design ” at Lighting Design Master’s level at Medialogy Section ADMT dept, Aalborg University, Denmark
2016 Summer Semester	
	<ul style="list-style-type: none"> – Introduction in light Intelligent and interactive research – Natural user interfaces – Computer vision – Connected lighting – Use of Arduino and Single Board Computers – Lighting Technology and communication protocols

Supervising Experience

- (2004-2008) Supervising 4 diploma theses (in co-operation with Prof MG Strintzis) at Electrical and Computer Engineering Dept of the Aristotle University of Thessaloniki, Greece
- (2006-2007) Supervising 2 postgraduate theses at Medical Informatics Postgraduate Program of the Aristotle University of Thessaloniki, Greece
- (2009-2012) Supervising 24 graduate theses at Informatics Engineering Dept of the Technological Educational Institute of Crete, Greece
- (2012-now) Supervising 30 projects (semester projects or master theses) under the **Problem Based Learning (PBL) Model** in Medialogy Section, Aalborg University

Academic and Professional Activities

- Editorial board member at 3D Research Journal of Springer Publishing <http://www.springer.com/engineering/signals/journal/13319?detailsPage=editorialBoard>
- Guest Editor of the Topical Issue on 3DTV in 3D Research Journal of Springer Publishing, G.A. Triantafyllidis (editor) Topical Issue on 3DTV, Journal on 3D Research, Springer, 3D Res. Vol. 3, No. 1, 2012.
- Guest Editor of the Special Issue on Advances in 3DTV broadcasting, in International Journal of Digital Multimedia Broadcasting, Hindawi Press: X. Zabulis, N. Grammalidis and G. Triantafyllidis (editors), Special Issue on Advances in 3DTV broadcasting, International Journal of Digital Multimedia Broadcasting, Hindawi Press, vol. 2010, Article ID 579514, 2010.
- Guest Editor of the Special issue on 3DTV: Capture, Transmission and Display of 3D Video in EURASIP Journal on Advances in Signal Processing: G. A. Triantafyllidis, A. Enis Cetin, Aljoscha Smolic, Levent Onural, Thomas Sikora, and John Watson (editors), Special Issue on 3DTV: Capture, Transmission, and Display of 3D Video, EURASIP Journal on Advances in Signal Processing, vol. 2009, Article ID 585216, 2009.
- **General Chair of "3DTV CON 2007", Kos Island, 7-9 May 2007** (www.3dtv-con.org). 3DTV CON 2007 was organized by the 3DTV Network of Excellence and ITI-CERTH, and was supported by the IEEE, EURASIP and MPEG-IF
- Publicity chair and member of the steering committee of the international conferences 3DTV CON 2008, 3DTV CON 2009, 3DTV CON 2010 and 3DTV CON 2011.
- Publicity chair of 7th International Conference "New Horizons in Industry, Business and Education" (NHIBE 2011) 25-26 August 2011, Chios Island, Greece.
- Program Committee Member of the conference Ubi-MUI2011: International ACM Workshop on Ubiquitous Meta User Interfaces, Scottsdale, Arizona, USA, Nov 2011.
- Member of the International Program Committee of the conferences series IMAGAPP International Conference on Imaging Theory and Applications.
- Member of the International Program Committee of conference IET Image Processing Conference (IPR 2012).
- Program Committee member of Signal & Image Technologies track, of the 5th International Conference on Signal Image Technology and Internet Based Systems, _orocco, 2009.
- Local Arrangements Chair of the second international conference of **"3D Data Processing Visualization and Transmission" (3DPVT 2004)**, Thessaloniki, 6-9 Sept 2004.
- Member of the Editorial Advisory Board of Journal of WSCG, Hardcopy - ISSN 1213-6972, CD ROM - ISSN 1213-6980, On-line - ISSN 1213-6964.
- Member of the Steering Committee of the conference: International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision, Plzen, Czech Republic.
- Reviewer of several IEEE conferences (ICIP, ICASSP, ISCAS etc) and journals (IEEE Trans on Circuits and Systems for Video Technology, IEEE Trans on Circuits and Systems I, IEE Proc Vision, Image and Signal Processing, IEE Electronics Letters, EURASIP Journal on Applied Signal Processing, etc).
- Reviewer of the Greek Secretariat of Research and Technology (www.gsrt.gr).
- Ex Vice-Director of Intelligent Systems Lab of TEI Crete.
- **Co-Organizer of the special session "Digital Signal Processing and Systems for Audio, Haptic and Visual Applications"** at the 18th International Conference on Digital Signal Processing, 1-3 July 2013, Santorini, Greece.
- Serving as semester coordinator for the 3rd semester in the Medialogy bachelor (Aalborg Univ) in 2013, 2014, 2015 and 10th semester of Lighting Design Master (Aalborg Univ) in 2016.
- Responsible of Light Lab and member of the Light Research Unit at AAU-Copenhagen.
- Member of the Augmented Cognition Lab and Multimodal Interactive Experiences Lab of AAU-Copenhagen.
- **Scientific organizer and lecturer of the Erasmus Intensive Program with the title Computer Vision and Intelligent Computer Systems, organized in Brno, June/July 2013, (<http://www.fit.vutbr.cz/events/ip2013>).**
- Attended the University Pedagogy course for Assistant Professors (Adjunktpædagogikum) at Aalborg University (2013-2014).

Current and Past Research Activities

1. LIGHTEL: Energy efficient lighting design for improving well-being of elderly through intelligent circadian lighting, EIForsk, 2016-2018

Status: Ongoing

Abstract: Albertslund inaugurates in 2016 its ambitious new health center with medical practitioners, rehabilitation facilities and housing for different groups of care recipients. LIGHTEL installs LED lights with sensors and an advanced intelligent management system. **It allows citizens to be 'prescribed' a light that supports well-being and**

health in the form of circadian rhythm and sleep. The light can also prevent depressions and 'winter mood'. The evaluation of the proposed lighting design will be based on a "holistic" approach involving anthropological (mood & behaviour), sensor-based (actigraphy) and medical factors. Light and management systems will accordingly be offered through the municipal home-care unit to citizens in their own home. With a growing proportion of elderly citizens, not just in the Danish population, but throughout Europe, the potential is enormous for obtaining societal benefits in terms of energy savings and in the form of improved health and safety.

Partners: Albertslund Kommune, Zumtobel Group, Gate21, Hvidovre Hospital

Post: Principal Investigator

2. Lighting Metropolis, Interreg, 2015-2018

Status: Ongoing

Abstract: Making Greater Copenhagen a world leader of living labs, for smart human centric lighting. As the 24 partners behind Lighting Metropolis start creating a new and unique ecosystem with the power to rethink, build and deliver smart human centric lighting solutions – its full potential will eventually involve far more collaborators and reach much further, beyond our own borders. The ecosystem will deliver living lighting labs with a world-leading innovative edge, across Greater Copenhagen – the international brand name for the wider border region between Denmark and Sweden.

Partners: 24 partners

Post: Project partner

3. The DockWeeder robot enables organic dairy farming by controlling grassland, Agri Era Net, 2016-2018

Status: Ongoing

Abstract: Broad-leaved dock (*Rumex obtusifolius* L.) is a common and troublesome weed with a wide geographic distribution. The weed is readily consumed by livestock but its nutritive value is less than that of grass. The high contents of oxalic acid and oxalates can affect animal health if consumed in larger doses. When left uncontrolled, the weed will reach a high density and reduce grass yield by 10 to 40%. In conventional dairy farming, the weed is normally controlled by using herbicides. In organic farming no synthetic pesticides are used and there is a risk that broad-leaved dock will spread. The solution proposed here consists of creating a robot that is capable of exploring a pasture by relying on GPS, equipping it with an array of sensors to detect the weed, and also equipping it with a non-chemical method to eliminate detected weeds. We use an existing, robust autonomous platform, we advance the state of the art of weed detection by combining two-dimensional (2-D) and three-dimensional (3-D) imaging, and we adopt and optimize an innovative, environment-friendly hot-water treatment to eliminate weeds. In summary, by combining the expertise of the consortium partners, we will be able to build a robot to detect and control broad-leaved dock which has immediate commercial potential (TRL 7).

Partners:

WUR, Wageningen

Post: Project Partner

4. The Parenthetical Window: Performing in a full Multimodal Artificial Environment adapted to the Circadian Rhythm, 2016

Status: Ongoing

Abstract: Parenthetical Window is a research project that proposes a lighting design for dark rooms and basements, which preserves the best possible conditions for human activity. The endeavour is a cultivation of the full sensorium using abstract forms of art (light, soundscape, fragrances) and its narratives (the illusion of perspective) in order to create a multimodal experience for the user. In this effect a changeable periodic evaluation will be set in a case-study room by connecting change of light with other senses (smell, corporeal cognition, entertainment).

Partners: Helsinki Collegium for Advanced Studies

Post: Project partner

5. Integrating Learning Analytics and Semantics in Problem Based Learning (Erasmus+ KA3 - Support for policy reform - Forward-Looking Cooperation Projects), 2016-2018

Status: Ongoing

Abstract: The current ever-changing world causes economies, technologies and professional domains to constantly transform. As a result, all sectors require competent workforce with skills to quickly adapt to rapid changes. The **Problem Based Learning (PBL) strategy addresses this challenge by accommodating active learners' participation** and corresponding skills development. However, PBL in its present mode has reached its maximum potential and should exploit innovative ways to unleash new capabilities. On the other hand, innovative approaches, like Learning Analytics (LA), can be confusing and overwhelming since they are still under-explored and lack structure. The project aims to integrate LA in PBL to capitalize on their respective strengths and overcome their drawbacks. In addition, the semantic annotation of resources can enhance this new paradigm by enabling personalized learning.

Partners: University of Macedonia, Open University of the Netherlands, Universidad de Alcalá, BOC Asset Management GmbH

Post: Project partner

6. The Open Solution Platform, (Outgoing + Return, TechnioSpring), 2015

Status: Completed

Abstract: The proposed project is a human feed-back provider service. This service is provided through a novel multipurpose platform that combines crowdsourcing and crowdfunding concepts. It is mainly intended for solving digital problems that cannot be done for computers alone due to their nature (i.e. extract semantic information from an image, understand the meaning of a tweet, identify actions in video sequences, etc.). The source data to be analyzed is pre-processed for its optimal human-based "understanding" and it is distributed through the users that will provide the required solution (after an automatic validation process based on a function that incorporates the reliability of the users and a redundancy factor).

Partners: Computer Vision Centre, Barcelona, Spain

Post: Project partner

7. Interactive Lighting for cycling tunnels

Capital Region of Copenhagen's Cycle Super Highways office (CSC) Project, 2015

Status: Ongoing

Abstract: The objective is to develop an understanding of creating with light with a focus on an interactive lighting design for cycling tunnels through media technology and human/conceptual interaction and functional aspects.

Partners: AAU (coordinator), CSC, Gladsaxe municipality, Copenhagen municipality

Post: AAU Technical Responsible

8. CPH:Sense – Capturing, Processing and Visualizing traffic data

Collaborative innovation project about intelligent transport systems (ITS), 2014

Status: Completed

Abstract: CPH:Sense suggests a multimodal and distributed approach to get the view on the street space use. Computer Vision and other sensor-based non-intrusive techniques are employed to understand and characterize the street space, featuring state-of-the-art recognition techniques in order to get the semantics out of the scene. To that end, we developed a micro capsule based on a single board computer aiming at improving the capturing, the processing and the visualization of traffic data through a black-box / local processing oriented approach: this approach permits to stream highly processed forms of information, avoiding the unwanted stream of images and bypassing then any possible privacy issue; this also leads to the possibility of saving historical data and to keep the global infrastructure very light, cheap and agile to scale. The CPH:Sense is based on an Open Hardware and Open Data approach, which makes possible to imagine and create further development both of the sensors and the software in every moment.

Partners: AAU (coordinator), LeapCraft

Post: Project's Scientific Responsible

9. Development of Innovative Algorithms and decision support system for the design of public transit systems (DIANA) Archimedes national projects, 2011-2013

Status: Completed

Abstract: The objective of the proposed project is the development of an innovative methodology for addressing the Transit Route Network Design Problem (TRNDP). For that purpose, an comprehensive approach will be followed, examining the problem structure and elements in multiple levels, including design objectives, the problem environment and optimization methodologies. Furthermore, developed elements and methodologies will be integrated in a GIS supported decision support system (DSS) for direct use by public transport operators and tested in a number of real world cases.

Partners: TEI of Crete (co-ordinator), TEI of Athens, NTU Athens, Polytechnic of Crete

Post: Project's Scientific Responsible

10. DIESI – Integrated System for Internet Music Performance

Thales National Projects (2011-2013)

Status: Completed

Abstract: The objective of the proposed project is to advance the current state-of-the-art in Networked Music Performance (NMP) systems. These systems allow geographically distributed musicians to collaborate or even perform a live concert through computer networks. NMP systems have the potential to advance music creativity, education, and cross-cultural interaction, offering a common platform for social engagement among musicians of any culture and background.

Partners: University of Crete (co-ordinator), National and Kapodistrian University of Athens, Athens University of Economics and Business, Technological Educational Institute of Crete

Post: Research group Responsible

11. GUARANTEE Project - A Guardian Angel for the Extended Home Environment

ITEA 2 program for advanced pre-competitive R&D in Software-intensive Systems and Services 2009-2012

Status: Completed

Abstract: GUARANTEE provides a technical solution for personal safety in the home environment. It introduces local and network-supported decision making for safety applications on the basis of sensor input and with immediate response and feedback to the people concerned.

Partners: GUARANTEE consortium consists of large companies (such as Philips), SMEs (such as ETIC and ACTIMAGE) and several universities (such as the universities of Madrid and Kaunas) as well as research centers (VTT and ESI).

Post: Research group Responsible

12. ComVICS - Computer Vision and Intelligent Computer Systems
Lifelong Learning Program Erasmus

Status: Completed

Post: Research group Responsible

13. 3D Reconstruction and web-based virtual tour for cultural heritage of Aegean region
GSRT, Greece-Turkey Joint Research and Technology Programs, 2005-07

Status: Completed

Post: Project's Scientific Responsible

14. Video MultiCASTing for real-time transmission over packet networks
GSRT, Greece-Turkey Joint Research and Technology Programs, 2005-07

Status: Completed

Post: Project's Scientific Responsible

15. 3DTV CON 2007 – The true vision
International Conference Organization (IEEE, EURASIP and MPEG-IF sponsored)

Status: Completed

Post: Project's Responsible

16. M-DRAW: Graphics development platform for mobile devices
GSRT – PABET Research program 2005

Status: Completed

Post: Project's Scientific Responsible

17. 3D TV
Network of Excellence, IST FP6, 2004-2008

Status: Completed

Post: Research group Responsible

18. OTELO Mobile Tele-Echography using an Ultra-Light Robot,
IST FP5, 2001-2005

Status: Completed

Post: Research group Responsible

19. HISCORE High Speed 3D and Colour Interface to the Real World,
IST FP5, 2000-2003

Status: Completed

Post: Research group Responsible

20. Net Logo - The European Interactive Educational Site,
EC, Educational Multimedia Programme, FP5, 1999-2001

Status: Completed

Post: Research group Responsible

21. Nausika – Odyssea: Development of a pilot software for educational purposes
Ministry of education 1999-2001

Status: Completed

Post: Research group member

22. Set Marks
CRAFT project 1998-2000,

Status: Completed

Post: Research group member

23. ACTS Panorama - PAKage for New OpeRational Autostereoscopic Multiview systems and Applications,
EC FP4, 1995-1998

Status: Completed

Post: Research group member

24. IHIS - Integrated Hospital Information System,

Greek National project EPET II, 1994-1997

Status: Completed

Post: Research group member

Collaborations

Dr Triantafyllidis has developed an extended network of academia and industry partnerships on the subject of image processing and computer vision. Some of these partners are:

- _ Gate 21, Denmark
- _ Albertslund Municipality, Denmark
- _ Zumtobel Group, Austria
- _ Hvidovre Hospital, Denmark
- _ LeapCraft ApS, Denmark
- _ City of Copenhagen, The Technical and Environmental Administration, Denmark
- _ **Capital Region of Copenhagen's Cycle Super Highways office (CSC), Denmark**
- _ Robotics & Automation Lab, Department of Mechanical and Manufacturing Engineering, AAU, Denmark
- _ Computer Vision Centre, Spain
- _ Laboratoire PRISME - Université d'Orléans, France
- _ Dept. of Electrical and Electronics Engineering, Bilkent University, Turkey
- _ Department of Electronic and Computer Engineering, Brunel University, West London, UK
- _ Department of Electrical Engineering, Kwangwoon University, South Korea
- _ Information Technologies Institute, Greece
- _ Aristotle University of Thessaloniki, Greece
- _ TEI of Athens, Greece
- _ TEI of Crete, Greece
- _ Dept of Informatics Engineering, TEI of Crete, Greece
- _ Hellenic Stereoscopic Company SA, Greece

Publications

- 4 editorial publications (1 conference proceedings and 3 journal special issues)
- 16 international scientific journal publications (5 IEEE, 2 Elsevier, 3 EURASIP, 2 Springer, 2 ELCVIA, 1 ComSIS, 1 EAI)
- 7 book chapters (6 Springer and 1 IGI-Press)
- 77 peer-reviewed international conference publications
- 4 national conference publications
- 3 Invited publications
- **Over 740 citations** (source: Google scholar)
- **h-index: 11 and i-index: 12** (source: Google scholar:
<http://scholar.google.dk/citations?user=RoWWEjAAAAAJ&hl=en>)

Editorial activities

- [1]. **G. Triantafyllidis** (editor), Topical Issue on 3DTV, Journal on 3D Research, Vol. 3, No. 1, Springer Publishing, 2012.
- [2]. X. Zabulis, N. Grammalidis and **G. Triantafyllidis** (editors), Special Issue on Advances in 3DTV: Theory and Practice, International Journal of Digital Multimedia Broadcasting, Hindawi Press, vol. 2010, Article ID 579514, 2010.
- [3]. **G. A. Triantafyllidis**, A. Enis Cetin, Aljoscha Smolic, Levent Onural, Thomas Sikora, and John Watson (editors), Special Issue on 3DTV: Capture, Transmission, and Display of 3D Video, EURASIP Journal on Advances in Signal Processing, vol. 2009, Article ID 585216, 2009.

- [4]. **G. Triantafyllidis** and L. Onural (editors), Proceedings of 3DTV CON 2007 - The true vision, 3DTV CON 2007, Kos island, Greece, 7-9 May 2007.

Book chapters

- [1]. N. Vidakis, E. Christinaki, E. Syntychakis, and **G. Triantafyllidis**, "Designing a general open authorable digital ecosystem for educational games to support special learning needs", *Virtual Reality technologies for health and clinical applications*, Vol.3: Games for rehabilitation, Eds Eva Pettersson Brooks & David Brown, Springer, 2016 (in press)
- [2]. **G.A. Triantafyllidis**, N. Grammalidis and D. Tzovaras, "Virtual community practice toolkits using 3D imaging technologies", *Virtual Community Practices and Social Interactive Media: Technology Lifecycle and Workflow Analysis*, D. Akoumianakis (ed.), IGI Global Inc. Press, ISBN: 978-1-60566-340-1, April 2009.
- [3]. A. Koz, **G. A. Triantafyllidis** and A. A. Alatan, "3d Watermarking: Techniques and Directions", *Three-Dimensional Television: Capture, Transmission, and Display*, (Eds) Haldun M. Ozaktas and Levent Onural, Springer, ISBN: 978-3-540-72531-2, July 2007.
- [4]. **G.A. Triantafyllidis**, N. Grammalidis and M.G. Strintzis, "Coding of stereoscopic and 3d images and video", *Encyclopaedia of Multimedia*, Furht, Borko (Ed.), Springer, ISBN: 0-387-24395-X, 2006.
- [5]. **G.A.Triantafyllidis**, N.Thomos, G.Nikolakis, D.Tzovaras, G.Litos and M.G.Strintzis: "User Interface environment and Image Communication in Mobile Tele-Echography", *M-Health: Emerging Mobile Health Systems*, Series: International Topics in Biomedical Engineering, (Eds.) R. Istepanian, S. Laxminarayan and C.S. Pattichis, Springer, ISBN: 0-387-26558-9, 2006.
- [6]. P. Vieyres, G. Poisson, **G. Triantafyllidis**, M.S. Pattichis, and G. Kontaxakis: "Future challenges and recommendations", *M-Health: Emerging Mobile Health Systems*, Series: International Topics in Biomedical Engineering, (Eds.) R. Istepanian, S. Laxminarayan and C.S. Pattichis, Springer, ISBN: 0-387-26558-9, 2006.
- [7]. D.Simitopoulos, S.A.Tsaftaris, N.V.Boulgouris, **G.A.Triantafyllidis** and M.G.Strintzis: "Digital Watermarking for the Copyright Protection of Compressed Video", *Intelligent Integrated Media Communication Techniques*, (Eds.) Mohammed Najim, Michael Ansorge, Jurij F. Tasic, Springer, ISBN: 1-4020-7552-9, 2003.

Journal publications

- [1]. Bonde, Esben Oxholm, Hansen, Ellen Kathrine, **Triantafyllidis, Georgios**, "Auditory and Visual based Intelligent Lighting Design for Music Concerts", submitted in *EAI Endorsed Transactions on Creative Technologies*, 2016.
- [2]. Eirini Christinaki, Nikolas Vidakis, and **Georgios Triantafyllidis**, "A Novel Educational Game for teaching Emotion Identification Skills to Preschoolers with Autism Diagnosis", *Computer Science and Information Systems Journal*, 11(2):723–743, 2014.
- [3]. Evlampios Apostolidis, Tsampikos Kounalakis, Charalampos Manifavas and **Georgios A. Triantafyllidis**, "Optimized Watermarking for Light Field Rendering based Free-View TV", *3D Research Journal*, Springer Publishing, Vol 4, Issue 1, March 2013.
- [4]. Michalis Dimitriou, Tsampikos Kounalakis, Nikolaos Vidakis and **Georgios Triantafyllidis**, "Detection and Classification of Multiple Objects using an RGB-D Sensor and Linear Spatial Pyramid Matching", *Electronic Letters on Computer Vision and Image Analysis (ELCVIA)*, Special Issue on Recent Applications on Computer Vision & Pattern Recognition, Vol 12, No 2, March 2013.
- [5]. Gregory Kalliatakis and **Georgios Triantafyllidis**, "Image based Monument Recognition using Graph based Visual Saliency", *Electronic Letters on Computer Vision and Image Analysis (ELCVIA)*, Special Issue on Recent Applications on Computer Vision & Pattern Recognition, Vol 12, No 2, March 2013.
- [6]. T. Kounalakis and **G. Triantafyllidis**, "Object detection and recognition using depth layers and SIFT-based machine learning", *3D Research Journal*, Springer Publishing, Vol 2, Issue 3, Sept 2011.
- [7]. Aljoscha Smolic, Karsten Mueller, Nikolce Stefanoski, Joern Ostermann, Atanas Gotchev, Gozde B. Akar, **Georgios Triantafyllidis** and Alper Koz, "Coding Algorithms for 3DTV - A Survey", *IEEE Trans. on Circuits and Systems for Video Technology*, Volume: 17, Issue: 11, pages: 1606-1621, Nov 2007.
- [8]. **G.A. Triantafyllidis**, N. Thomos, C. Canero, P. Vieyres and M.G. Strintzis, "A user interface for mobile robotized tele-echography", *Elsevier, Nuclear Inst. and Methods in Physics Research, A*, Vol 569, Issue 2, Dec 2006.
- [9]. C.Canero, N.Thomos, **G.A.Triantafyllidis**, G.Litos and M.G.Strintzis: "Mobile Tele-echography: User Interface Design", *IEEE Transactions on Information Technology in Biomedicine*, Vol. 9, No. 1, pp. 44-49, March 2005.
- [10]. **G.A.Triantafyllidis**, M.Varnuska, D.Sampson, D.Tzovaras and M.G.Strintzis: "An Efficient Algorithm for the Enhancement of JPEG Coded Images", *Computers & Graphics: An International Journal of Systems & Applications in Computer Graphics*, vol. 27(4), pp. 529-534, August 2003.
- [11]. N.Ploskas, D. Simitopoulos, D.Tzovaras, **G.A.Triantafyllidis** and M.G.Strintzis: "Rigid and Non-Rigid 3D Motion Estimation from Multiview Image Sequences", *Elsevier Signal Processing: Image Communication Journal*, Vol. 18, Issue 3, pp.185-202, March 2003.

- [12]. **G.A.Triantafyllidis**, D.Tzovaras and M.G.Strintzis: "**Blocking Artifact Detection and Reduction in Compressed Data**", IEEE Trans. on Circuits and Systems for Video Technology, Vol.12, No.10, pp.877-890, October 2002.
- [13]. **G.A.Triantafyllidis**, D.Tzovaras and M.G.Strintzis: "**A Bayesian Approach for Segmentation in Stereo Image Sequences**", EURASIP Journal on Applied Signal Processing (JASP), Special Issue on Signal Processing for 3D Imaging and Virtual Reality, Vol. 2002, No. 10, October 2002.
- [14]. **G.A.Triantafyllidis**, D.Tzovaras, D.Sampson and M.G.Strintzis: "**Combined Frequency and Spatial Domain Algorithm for the Removal of Blocking Artifacts**", EURASIP Journal on Applied Signal Processing (JASP), Special Issue on Image Analysis for Multimedia Interactive Services, Part II, vol. 2002(6), pp. 601-612, June 2002.
- [15]. **G.A.Triantafyllidis**, D.Tzovaras and M.G.Strintzis: "**Occlusion and Visible Background and Foreground areas in Stereo: A Bayesian Approach**", IEEE Trans. on Circuits and Systems for Video Technology, Special Issue on 3D Video Technology, Vol.10, No.4, pp.563-576, June 2000.
- [16]. **G.A.Triantafyllidis** and M.G.Strintzis: "**A Context Based Adaptive Arithmetic Coding Technique for Lossless Image Compression**", IEEE Signal Processing Letters, Vol.6, No.9, pp.168-171, July 1999.

Conference publications

- [1]. Kounalakis, Tsampikos; **Triantafyllidis, Georgios**; Nalpantidis, Lazaros, "Weed Recognition Framework for Robotic Precision Farming", 2016 IEEE International Conference on Imaging Systems and Techniques (IST). Chania, Crete October 2016.
- [2]. Flyvholm, Anton; Sen, Sumit; Xylakis, Manolis; Nielsen, Stine Maria Louring; **Triantafyllidis, Georgios**; Andresen, Linda; Pedersen, Mette Merete, "A personalised and adaptive intelligent system to adjust circadian lighting for elderly housing", 15th International Symposium on Ambient Intelligence and Embedded Systems, Heraklion, Greece, September 2016.
- [3]. Kounalakis, Tsampikos; Boulgouris, Nikolaos; **Triantafyllidis, Georgios**, "Content-adaptive pyramid representation for 3D object classification", 2016 IEEE International Conference on Image Processing, Arizona, USA, September 2016.
- [4]. Frangiadoulis, Alexandros; Kounalakis, Tsampikos; **Triantafyllidis, Georgios**; Vidakis, Nikolaos, "Deep Learning Implementation Framework for Image Classification Applications", 15th International Symposium on Ambient Intelligence and Embedded Systems, Heraklion, Greece, September 2016.
- [5]. Lemi, Esther; **Triantafyllidis, Georgios**, "Parenthetical Windows: A Project on How Artificial Light and Sound Architecture Affect Human Perception on Norms", ISSC 2016 International Conference: The logics of image: Visualization, iconicity, imagination and human creativity. Santorini, Greece, September 2016.
- [6]. Kalliatakis, Grigorios; Vidakis, Nikolaos; **Triantafyllidis, Georgios**, "Web-based Visualisation of Head Pose and Facial Expressions Changes: Monitoring Human Activity Using Depth Data", 8th Computer Science and Electronic Engineering Conference, Essex University, UK, September 2016.
- [7]. Hansen, Ellen Kathrine; Mullins, Michael Finbarr; **Triantafyllidis, Georgios**, "Dynamic light as a transformational tool in computer-aided design", Complexity and Simplicity: Proceedings of the 34th International Conference on Education and Research in Computer Aided Design in Europe. Oulu, Finland, eCAADe, August 2016.
- [8]. Kivac, Robert ; Øllgaard Klem, Sune ; Béneé Olsen, Sophus ; Bækgaard Solander, Amalie ; Dyrberg von Spreckelsen, Simon; Triantafyllou, Evangelia; **Triantafyllidis, Georgios**, "MUVA: a Multimodal Visceral design Ambient device", HCI International 2016 : 5th International Conference on Design, User Experience, and Usability. Springer Publishing Company, Toronto, Canada, July 2016.
- [9]. Vidakis, Nikolaos; Kalafatis, Konstantinos; **Triantafyllidis, Georgios**, "A Multimodal Interaction Framework for Blended Learning", 1st EAI International Conference on Design, Learning & Innovation. EAI - European Alliance for Innovation, Esbjerg, Denmark May 2016
- [10]. Vidakis, Nikolaos; Kavallakis, George; Triantafyllidis, Georgios, "Emotion Index of Cover Song Music Video Clips based on Facial Expression Recognition", 5th EAI International Conference: ArtsIT, Interactivity & Game Creation. EAI - European Alliance for Innovation, Esbjerg, Denmark, May 2016.
- [11]. Oxholm, Esben; Hansen, Ellen Kathrine; **Triantafyllidis, Georgios**, "Multimodal Detection of Music Performances for Intelligent Emotion Based Lighting", 5th EAI International Conference: ArtsIT, Interactivity & Game Creation. EAI - European Alliance for Innovation, Esbjerg, Denmark, May 2016.
- [12]. Hansen, Ellen Kathrine, **Triantafyllidis, Georgios**, "Storytelling lighting design (ST-LiD)", Interactive Storytelling: 8th International Conference on Interactive Digital Storytelling, ICIDS 2015, Proceedings. Springer, p. 404-405 (Lecture Notes in Computer Science, Vol. 9445). Copenhagen, Denmark, December, 2015,
- [13]. Grani, Francesco, Overholt, Daniel, Erkut, Cumhur, Gelineck, Steven, **Triantafyllidis, Georgios**, Nordahl, Rolf, Serafin, Stefania, "Spatial Sound and Multimodal Interaction in Immersive Environments", Proceedings of the 9th Audio Mostly Conference on Interaction With Sound, Association for Computing Machinery, Thessaloniki, Greece, October 2015.

- [14]. Vidakis, Nikolas, Syntychakis, Efthymios, Kalafatis, Konstantinos, Varhalamas, Petros and **Triantafyllidis, Georgios**, "Concealing education into games", *Proceedings of the 9th European Conference on Games-based Learning*, p. 554-563, Nord-Trondelag University College Steinkjer, Norway 8-9 October 2015
- [15]. Nikolas Vidakis, Efthymios Syntychakis, Kostantinos Kalafatis, Eirini Christinaki, and **Georgios Triantafyllidis**, *Ludic Educational Game Creation Tool: teaching schoolers road safety*, *HCI International 2015*. Springer, Los Angeles 2-7, August 2015.
- [16]. L. Reng, E. Triantafyllou and **G. Triantafyllidis**, "Rethinking and Redesigning an Image Processing Course from a Problem-Based Learning Perspective", *5th International Research Symposium on PBL (IRSPBL)*, San Sebastian, 6-9 July 2015.
- [17]. G. Kalliatakis and **G. Triantafyllidis**, "Head Pose 3D Data Web-based Visualization", *ACM Web3D 2015, 20th International Conference on 3D Web Technology*, Heraklion, Crete, Greece, 18-21 June 2015.
- [18]. F. Grani, S. Trento and **G. Triantafyllidis**, "Monitoring in Sustainable Urban Mobility Plans: the CPH:Sense approach", *Networked Urban Mobilities Conference*, Copenhagen, Denmark, Nov. 2014.
- [19]. E. Triantafyllou, O. Timcenko and **G. Triantafyllidis**, "Reflections on Students Projects with Motion Sensor Technologies in a Problem-Based Learning Environment", *8th European Conference on Games Based Learning ECGBL*, Berlin Oct 2014.
- [20]. Burelli, Paolo; **Triantafyllidis, George**; Patras, Ioannis, "Non-invasive Player Experience Estimation from Body Motion and Game Context", *IEEE International Conference on Computational Intelligence and Games*, Dortmund, Germany, August 26 - 29, 2014
- [21]. Potetsianakis, Emmanouil; Ksylakis, Emmanouil; **Triantafyllidis, George**, "A Kinect-Based Framework For Better User Experience in Real-Time Audiovisual Content Manipulation", *Proceedings of International Conference on Telecommunications and Multimedia (TEMU)*. IEEE Xplore, Heraklion, Greece, July 28-30, 2014.
- [22]. Nikolas Vidakis, Eirini Christinaki, Iosif Serafimidis, and **Georgios Triantafyllidis**, "Combining ludology and narratology in an open authorable framework for educational games for children: the scenario of teaching preschoolers with autism diagnosis", *HCI International 2014*. Springer, Heraklion 22-27, June 2014.
- [23]. Cumhur Erkut, Sofia Dahl, **Georgios Triantafyllidis**, "Sketches in Embodied Interaction : Balancing movement and technological perspectives", *HCI International 2014*. Springer, Heraklion 22-27, June 2014.
- [24]. Nikolaos Skordilis, Nikolaos Vidakis, **Georgios Triantafyllidis**, Lazaros Nalpantidis, "Depth camera driven mobile robot for human localization and following", at *Proceedings of 2nd AAU Robotics Workshop*, Feb 2014
- [25]. E Christinaki, N. Vidakis and **G. Triantafyllidis**, "Facial Expression Recognition Teaching to Preschoolers with Autism: A Natural User Interface approach", *6th Balkan Conference in Informatics (BCI)*, Thessaloniki, Sept 2013.
- [26]. N. Vidakis, A. Vlasopoulos, T. Kounalakis, P. Varchalamas, M. Dimitriou, G. Kalliatakis, E. Syntychakis, J. Christofakis and **G. Triantafyllidis**, "Multimodal Natural User Interaction for Multiple Applications", *18th International Conference on Digital Signal Processing (DSP)*, Santorini, Greece, July 2013.
- [27]. E Christinaki, N. Vidakis and **G. Triantafyllidis**, "A gesture-controlled Serious Game for teaching emotion recognition skills to preschoolers with autism", poster presentation at the *8th International Conference on the Foundations of Digital Games*, Chania, Greece, May 2013.
- [28]. N. Vidakis, M. Syntychakis, **G. Triantafyllidis** and D. Akoumianakis, "Multimodal Natural User Interaction for Multiple Applications: The Gesture – Voice Example", *2012 International Conference on Telecommunications and Multimedia (TEMU)*, Chania, Greece, Aug 2012
- [29]. M. Demetriou, N. Vidakis and **G. Triantafyllidis**, "Fast 3d scene object detection and real size estimation using microsoft kinect sensor", *13th IASTED International Conference on Computer Graphics and Imaging*, Heraklion, Greece, June 2012
- [30]. G. Kalliatakis and **G. Triantafyllidis**, "Image based touristic monument classification using graph based visual saliency and scale-invariant feature transform", *13th IASTED International Conference on Computer Graphics and Imaging*, Heraklion, Greece, June 2012
- [31]. G. Papadourakis, T. Kounalakis, I. Deligiannis, N. Manias, **G. Triantafyllidis**, J. Vandenabeele, I. Uusitalo, "GUARANTEE: A guardian angel for the extended home environment", *7th International Conference "New Horizons in Industry, Business and Education" (NHIBE 2011)*, Chios Island, Greece, 25-26 August 2011.
- [32]. G. Papadourakis, T. Kounalakis, I. Deligiannis, N. Manias, **G. Triantafyllidis**, "Decision Engine Design for GUARANTEE project", *10th International Symposium on Ambient Intelligence and Embedded Systems, AMIES2011*, Chania, Crete, Greece, 22 - 24 September, 2011.
- [33]. Emmanuelle Thouin, Adel Hafiane, Pierre Vieyres, Nikolaos Xylourgos, G. Papadourakis, **Georgios Triantafyllidis**, Alain Delbos and Eve Charest, "Nerve region detection for ultrasound guided LRA", *6th Mediterranean Conference on Information Systems, IS: Crossroads of Technology, People, Organizations and Markets, TRACK: eHealth Informatics*, Limassol, Cyprus, Sept 3-5, 2011
- [34]. G. Kavalakis and **G. Triantafyllidis**, "Facial Expression Recognition in Music Video Clips", *Eureka 2011*, Kastoria, Greece, 30 Sept. 2011.
- [35]. V. Theodorou, B. Zouzoulas, G. Papadourakis and **G. Triantafyllidis**, "Gaze direction detection for cursor control application", *3rd International Conference on Image Processing and Communications (IP&C 2011)*, Bydgoszcz, Poland, 7-9 September 2011
- [36]. **G. Triantafyllidis**: "Image quality measurement in the frequency domain", *4th International Symposium on Communications Control & Signal Processing*, Limassol, Cyprus, March 3-4 2010.

- [37]. E. Apostolidis and **G. Triantafyllidis**: "Free-View TV Watermark Selection Based on the Distribution Characteristics", 3rd International Conference on 3DTV, 3DTV CON 2009, "3DTV CON 2009", Potsdam, Germany, 4-6 May 2009.
- [38]. Y. Bastanlar, E. Yilmaz, Y. Yardimci Cetin, N. Grammalidis, X. Zabulis and **G. Triantafyllidis**: "3D Reconstruction for a Cultural Heritage Virtual Tour System", XXI Congress of the International Society for Photogrammetry and Remote Sensing, ISPRS 2008, Beijing, China, 3-11 July 2008.
- [39]. Vassiliki Mitropoulou and **Georgios A. Triantafyllidis**: "Primary School Children's Illegal Internet Behaviour in Greece: a Case Study and Suggestions", in AACE, ED-MEDIA 2008, Vienna Austria, June 30-July 4, 2008.
- [40]. E. Apostolidis and **G. Triantafyllidis**: "Watermark Selection for Light Field Rendering in FTV", 2nd International Conference on 3DTV, 3DTV CON 2008, Istanbul, Turkey, May 2008.
- [41]. E. Apostolidis and **G. Triantafyllidis**: "Free-View Point TV Watermarking Evaluated on Generated Arbitrary Views", 3rd International Conference on Computer Vision Theory and Applications, Funchal, Madeira – Portugal, 22 .
- [42]. E. Apostolidis, A. Koz and **G. Triantafyllidis**: "Best Watermarking Selection for Free-View Point Television", 14th International Conference on systems, Signals and Image Processing IWSSIP 2007 and 6th EURASIP Conference Focused on Speech and Image Processing, Multimedia Communications and Services EC-SIPMCS 2007, Maribor, Slovenia, June 2007
- [43]. E. Apostolidis, A. Koz and **G. Triantafyllidis**: "Watermarking tests for free-view point television", 1st International Conference on 3DTV, 3DTV CON 2007, Kos island, Greece, May 2007.
- [44]. G. Litos, X. Zabulis and **G.A. Triantafyllidis**: "Synchronous Image Acquisition based on Network Synchronization", IEEE Workshop on Three-Dimensional Cinematography (in conjunction with CVPR) New York City, June 2006
- [45]. **G.A. Triantafyllidis**, N. Thomos, C. Canero, P. Vieyres and M.G. Strintzis: "Otelio Mobile Tele-Echography: A System Interface", International Symposium on Health Informatics and Bioinformatics, Belek, Antalya, Turkey, Nov. 10-12, 2005
- [46]. **Triantafyllidis**, D. Tzovaras and M.G. Strintzis: "Reduction of Blocking Artifacts in Block-based Compressed Images", Advanced Concepts for Intelligent Vision Systems: 7th International Conference, ACIVS 2005, Antwerp, Belgium, September 2005.
- [47]. **G.A. Triantafyllidis**, N. Thomos, C. Canero, P. Vieyres and M.G. Strintzis: "A User Interface for Mobile Robotized Tele-Echography", 3rd International Conference on Imaging Technologies in Biomedical Sciences: ITBS2005, Milos Island, Greece, September 2005.
- [48]. **G.A. Triantafyllidis**, V. Mitropoulou: "Changing classroom environment by the use of ict and the new emerging role of the teacher", IADIS e-Society 2005, Qawra, Malta, June 2005.
- [49]. V. Mitropoulou, **G.A. Triantafyllidis**: "Design of Educational Software: programmer and teacher approach", 3rd International Symposium of Interactive Media Design, Istanbul Turkey, January 2005.
- [50]. S.Kyratzi, C.Collyda, G.Nikolakis, **G.A.Triantafyllidis**, D.Tzovaras, P.Daras and M.G.Strintzis: "A User Interface Environment in Mobile Tele-echography", Proc. International Academic Conference on eHealth Telemedicine and Telecare, TELEMED 03, London, January 2003.
- [51]. C. Delgorge, L. Al Bassit, C. Novales, N. Smith-Guerin, G. Poisson, P. Vieyres, L. Urbain, O. Merigeaux, F. Aversa, M.G. Strintzis, **G. Triantafyllidis**, Ph. Arbeille, R. Comino, R. Istepanian, T. Owens, A. Bove, G. Nicolai, A. ove, C. Bru, A. D'Aquila, M.: "MOBILE Tele-Echography using an ultra-Light rObot", International Academic Conference on eHealth Telemedicine and Telecare, TELEMED 03, London, January 2003.
- [52]. **G.A.Triantafyllidis**, D.Tzovaras and M.G.Strintzis: "Detection of Occlusion and Visible Background and Foreground Areas in Stereo Image Pairs", International IEEE Conference on Electronics, Circuits and Systems, ICECS 2002, Dubrovnik, Croatia, September 2002.
- [53]. **G.A.Triantafyllidis**, D.Tzovaras, D.Sampson and M.G.Strintzis: "A Hybrid Algorithm for the removal of Blocking Artifacts", Proc. of the IEEE International Conference on Multimedia and Expo, pp. 161-164, Lausanne, Switzerland, August 2002.
- [54]. N.Ploskas, D.Tzovaras, **G.A.Triantafyllidis** and M.G.Strintzis: "A Neural Network Algorithm for Rigid 3D Motion Estimation from Multiview Image Sequences", International Conference on Artificial Neural Networks ICANN 2002, Madrid, Spain, August 2002.
- [55]. **G.A.Triantafyllidis**, D.Sampson, D.Tzovaras and M.G.Strintzis: "Blockiness Reduction in JPEG Coded Images", 14th International Conference on Digital Signal Processing, pp. 1325-1328, Santorini, Greece, July 2002.
- [56]. Ch.Collyda, S.Kyratzi, **G.A.Triantafyllidis**, N.V.Boulgouris and M.G.Strintzis: "The Graphical User Interface for the Otelio Tele-Echography System", 6th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2002) Orlando, USA, July 2002.
- [57]. K.E.Zachariadis, N.V.Boulgouris, N.Thomos, **G.A.Triantafyllidis** and M.G.Strintzis: "Wavelet-based Communication of Medical Image Sequences", 4th International Workshop on Enterprise Networking and Computing in Health Care Industry, Nancy, France, June 2002.
- [58]. **G.A.Triantafyllidis** and M.G.Strintzis: "A Neural Network for Context-based Arithmetic Coding in Lossless Image Compression", 2002 WSES International Conference on Neural Networks and Applications, Puerto De La Cruz, Canary Islands, Spain, February 2002.

- [59]. N.Ploskas, D.Tzouvaras, **G.A.Triantafyllidis** and M.G.Strintzis: "An Efficient Neural Network Approach for Rigid and Non-Rigid 3D Motion Estimation from Multiview Image Sequences", Neuro Fuzzy Technologies Congress, Cuba, January 2002.
- [60]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "Blocking Artifact Reduction in Frequency Domain", IEEE International Conference on Image Processing ICIP, Thessaloniki, Greece, October 2001.
- [61]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "A Transform Domain Approach in Blocking Effect Detection", International IEEE Conference on Electronics, Circuits and Systems, ICECS 2001, Malta, September 2001.
- [62]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "A Novel Algorithm for Blockiness Reduction", EURASIP Conference on Digital Signal Processing for Multimedia Communications and Services, Budapest, Hungary, September 2001.
- [63]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "Detection of Blocking Artifacts of Compressed Still Images", 11th International Conference on Image Analysis and Processing, Palermo, Italy, September 2001.
- [64]. **G. Triantafyllidis**, C. Karagiannidis and D. Sampson: "Vertical Learning Portals Evaluation: The NETLogo Case Study", 7th World Conference on Computers in Education: Networking the Learner (WCCE 2001), Copenhagen, Denmark, July 2001.
- [65]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "Occlusion Detection in Stereopairs", International Conference on Trends in Communications, EUROCON 2001, Bratislava, Slovakia, July 2001.
- [66]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "An Efficient Algorithm for Smoothing DCT Compression Artifacts", 5th WSES/IEEE World Multiconference on Circuits, Systems, Communications & Computers, Rethymnon, Crete, July 2001.
- [67]. **G.A.Triantafyllidis** and M.G.Strintzis: "An Efficient Technique for Arithmetic Entropy Coding of images", Tenth International Conference on Computational Methods and Experimental Measurements, Alicante, Spain, June 2001.
- [68]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "DTC Coefficients adjustment for deblocking compressed images", Proc. Euroimage ICAV 3D 2001 Conference, Mykonos, Greece, May 2001.
- [69]. **G.A.Triantafyllidis** and M.G.Strintzis: "A Squares Algorithm for Efficient Context-Based Adaptive Arithmetic Coding", IEEE International Symposium on Circuits and Systems (ISCAS), Sydney, Australia, May 2001.
- [70]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "Blockiness Detection in Compressed Data", IEEE International Conference on Acoustics, Speech, and Signal Processing ICASSP 2001, Salt lake City, Utah, May 2001.
- [71]. **G.A.Triantafyllidis** and M.G.Strintzis: "Arithmetic Entropy Coding for Lossless Wavelet Image Compression", Workshop on Image Analysis For Multimedia Interactive Services, Tampere University of Technology, Tampere, Finland, May 2001.
- [72]. **G. Triantafyllidis**, C. Karagiannidis and D. Sampson: "Evaluation Study of the NETLogo European Learning Portal", 20th World Conference on Open Learning and Distance Education (ICDE 2001), The Future of Learning - Learning for the Future: Shaping the Transition, Dusseldorf, Germany, April 2001.
- [73]. **G.A.Triantafyllidis** and M.G.Strintzis: "A Context Based Arithmetic Image Coding using a Separate Least Squares Algorithm", 22nd Picture Coding Symposium, Seoul, Korea, April 2001.
- [74]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "A Compound Bayes Test for Detection of Occlusion and Visible Background and Foreground Areas in Stereo", ", International Workshop on Digital and Computational Video, DCV'01, Tampa, USA, February 2001.
- [75]. **G.A.Triantafyllidis** and M.G.Strintzis: "A Separate Least Squares Algorithm for Efficient Arithmetic Coding in Lossless Image Compression", 9-th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision, Plzen, Czech Republic, February 2001.
- [76]. **G.A.Triantafyllidis**, D.Tzouvaras, M.G.Strintzis: "A Bayesian segmentation of Stereopairs", IEEE International Conference on Multimedia and Expo. (ICME2000), New York City, August 2000.
- [77]. **G.A.Triantafyllidis**, D.Tzouvaras and M.G.Strintzis: "Efficient Classification of Occlusion Areas in Stereo pairs", Int'l Workshop on Synthetic-Natural Hybrid Coding and Three Dimensional Imaging: IWSNHC3I 99, Santorini, September 1999.

Invited publications

- [78]. **G. Triantafyllidis**, "Three Dimensional TV (3DTV): Old technologies for the future", Information magazine of TEI Crete, Vol 2, 2010
- [79]. N. Manias, T. Kounalakis, **G. Triantafyllidis** and G. Papadourakis, "Program Guarantee: A Guardian Angel for the Extended Home Environment", Information magazine of TEI Crete, Vol 6, 2011.
- [80]. G. Kawalakis, P. Zervas and **G. Triantafyllidis**, "Music and image analysis for mood recognition", Information magazine of TEI Crete, Vol 6, 2011.

Publications in national conferences

- [81]. E. Apostolidis and **G.A. Triantafyllidis**: "Watermark selection for Free-View TV based on the distribution characteristics", 2nd National Conference of Electrical and Computer Engineers students, Athens, 2008
- [82]. D.Kehagias, **G._Triantafyllidis**, D.Sampson, V.Mitropoulou and C.Vasilopoulos: "Design and Development of Educational Software of Guided Discovery for supporting Religion Studies in Secondary Education", National Conference on Informatics and Education, pp. 47, University of Thessaloniki, November 2000.
- [83]. D.Kehagias, **G._Triantafyllidis**, D.Sampson, V. Mitropoulou and C.Vasilopoulos: "Educational Software for Teaching Religions", 2nd National Conference on ICT in Education, University of Patras, October 2000.
- [84]. D.Kehagias, **G.Triantafyllidis**, Y.Melidis, K.Akanthopoulou, Ch.Vasilopoulos and D.Sampson: "Open-Ended Educational Software of Guided Discovery for supporting Religion Studies Classes", 3rd National Workshop on Informatics in the Secondary Education, pp. 178-184, Athens, February 2000.