

Curriculum Vitae
Dr. George A. Papakostas

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1. PERSONAL INFORMATION

Name: George
Surname: Papakostas
Middle Name: Athanasios
Year of Birth: 1975
Place of Birth: Naoussa – Imathias, Greece
Country of Citizenship: Greece
Home Address: Ilia Geraga 22, Hrysa – Xanthi
Phone Number: 2541072703 – Mobile: 6974119270
Marital Status: Married - 1 child
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2. EDUCATION

2007 Ph.D. in Computer Science, Democritus University of Thrace (DUTH), Department of Electrical and Computer Engineering. Thesis title: *“Development of Intelligent Neural Classifiers for Computer Vision Applications”*.

2002 M.S.Eng. in Computer Science, Democritus University of Thrace (DUTH), Department of Electrical and Computer Engineering. Thesis title: *“Wavelet-based Feature Extraction for Pattern Recognition Applications”*.

1999 B.S.Eng. in Electrical and Computer Engineering, Democritus University of Thrace (DUTH), Department of Electrical and Computer Engineering. Thesis title: *“Development of a Computer Vision Software Platform”*.

1993 High School Degree, 4th High School of Harilaou in Thessaloniki.

3. COMPUTER SKILLS

Operating Systems

- MS-DOS
- Windows
- Linux (Ubuntu, Fedora)

Office Software

- Microsoft Office, LaTeX

Software Development Languages

- GPU Programming - CUDA
- C, Pascal, Delphi, Builder C++, Assembly
- Matlab Toolboxes: Image, Signal Processing, Genetic Algorithms, Neural Networks, LMI, Wavelet, Fuzzy

Embedded Software Development Tools

- Code Composer Studio 1.20 για την πλατφόρμα EVM TMS320C6201, DSP Programming
- AVR Microcontroller Programming
- Motorola ColdFire Microprocessors Programming

4. PROFESSIONAL EXPERIENCE

DURATION	EMPLOYER	POSITION
10/2011 – 05/2012	INTRALOT S.A.	Senior Software Engineer.
02/2009 – 07/2009	INTRALOT S.A.	Senior Software Engineer.
07/2000 – 02/2009	INTRACOM TELECOM S.A.	Senior Software Engineer.
07/1999 – 09/1999	ANADELTA SOFTWARE	Internship as Electrical and Computer Engineer.
07/1998 – 09/1998	COCO-MAT	Internship as Electrical and Computer Engineer.
07/1997 – 09/1997	PUBLIC POWER CORPORATION S.A.	Internship as Electrical and Computer Engineer.

DETAILED PROFESSIONAL EXPERIENCE IN INTRACOM TELECOM S.A.

Project	IBAS MSAN
Duration	21/06/2007 – 30/01/2009
Field of Expertise	Telecommunication Systems Software
Position	Team Leader
Task	Software Development
Link	http://www.intracom-telecom.com/en/products/telecom_products/wireline_access/ibas.htm .
Project	Microlink – IDR140M
Duration	01/12/2006 – 20/06/2007
Field of Expertise	Wireless Transmission Systems
Position	Staff SW Engineer / Applications Consultant
Task	Software Development
Link	http://www.intracom-telecom.com/en/products/telecom_products/wireless_transmission/microlink_family.htm
Project	FLEXACCESS
Duration	01/03/2005 – 13/02/2006
Field of Expertise	Telecommunication Systems Software
Position	Team Leader
Task	Software Development
Link	http://www.conklin-intracom.com/products/accessproducts
Project	FASTMUX 2004 DSLAM
Duration	01/11/2004 – 28/02/2005
Field of Expertise	Telecommunication Systems Software
Position	Staff SW Engineer / Applications Consultant
Task	Software Development
Link	http://www.intracom-telecom.com/en/products/telecom_products/wireline_access/fastmux_2004.htm

Project	FASTMUX 2003 DSLAM
Duration	01/04/2003 – 31/10/2004
Field of Expertise	Telecommunication Systems Software
Position	Team Leader
Task	Software Development
Link	http://www.intracom-telecom.com/en/products/telecom_products/wireline_access/fastmux_2003.htm
Project	FASTMUX 2000 Mini DSLAM – List8s
Duration	01/04/2002 – 31/03/2003
Field of Expertise	Telecommunication Systems Software
Position	SW Engineer / Applications Consultant
Task	Software Development
Link	http://www.intracom-telecom.com/downloads/pdf/products/access_netw/fastmux2000_datasheet.pdf
Project	DSP Modem
Duration	23/01/2001 – 31/03/2002
Field of Expertise	INTRACOM FUNDED R & D PROJECTS
Position	Researcher
Task	Software Development
Link	

5. TEACHING EXPERIENCE

DURATION	EMPLOYER	DESCRIPTION
2006 - 2015	Technological Educational Institute (TEI) of Eastern Macedonia & Thrace / Department of Computer & Informatics Engineering	<p>Position: Adjunct Assistant Professor</p> <p>Lessons:</p> <ol style="list-style-type: none"> 1) Introduction to Software Engineering 2) Software Project Management 3) Intelligent Systems 4) Data Structures and Algorithms 5) Operating Systems 6) Automatic Control 7) Computer Vision 8) Parallel and Distributed Computing
2007 –2009	Democritus University of Thrace (DUTH) / Department of Production and Management Engineering	<p>Position: Lecturer (407/80)</p> <p>Lessons:</p> <ol style="list-style-type: none"> 1) Data structures 2) Structured Programming 3) Computer-Aided Design (CAD) 4) Electronics

2000 – 2003	Democritus University of Thrace (DUTH) / Department of Computer and Electrical Engineering	Position: Teaching Assistant Lessons: 1) Robotics 2) Computational Intelligence 3) Control Systems I 4) Control Systems II
2002 - 2005	I.E.K. Xinis	Position: Informatics Teacher (ECDL) 1122 hours

6. RESEARCH PROJECTS

DURATION	RESEARCH PROJECT
01/05/2014 – 30/09/2015	Thalis: “Study and Forecasting of Economic Data using Machine Learning Methods”. Co-funded by the European Union (European Social Fund) and national resources.
01/01/2014 – 31/12/2014	Thalis : “NANOCAPILLARY MIS 375233” research project, co-funded by the European Union (European Social Fund) and national resources.
01/11/2009 – 30/11/2010	FAST, Marie Curie RTN, EU program. ”Advanced Signal-Processing for Ultra-Fast Magnetic Resonance Spectroscopic Imaging, and Training”, (contract number MRTN-CT-2006-035801).
15/05/2002 – 14/05/2003	PRENED’99 national program. “Development of Control Techniques for Biotechnological Systems”.
15/05/2001 – 14/05/2002	PRENED’99 national program. “Study and Development of Neural Networks for the Control of Biotechnological Systems”.
01/03/2000 – 31/12/2000	TSMEDÉ national program. “Comparative Analysis of Morphological and Coordinate Logic Filters and their Development into an Image Processing Software Platform.

7. PUBLICATIONS

Research Fields: *Computational Intelligence, Computer Vision, Pattern Recognition, Biometrics, Parallel & Distributed Computing, Evolutionary Computation, Image/Signal Processing, Medical Image Analysis*

A. BOOK CHAPTERS

- A.13** G.A. Papakostas, D.A. Karras, B.G. Mertzios, D. van Ormondt, and D. Graveron-Demilly, “**Two-stage Evolutionary Quantification of in vivo MRS Metabolites**”, in *Emerging Trends in Computational Biology, Bioinformatics, and Systems Biology*, Q.N. Tran and H. R. Arabnia (Eds.), Elsevier/MK, **in press**.
- A.12** G.A. Papakostas, “**Improving the Recognition Performance of Moment Features by Selection**”, in *Feature Selection for Data and Pattern Recognition*, U. Stanczyk and L.C. Jain (Eds.), Springer, Studies in Computational Intelligence, vol. 584, pp. 305-327, 2015.
- A.11** E.D. Tsougenis, G.A. Papakostas and D.E. Koulouriotis, “**Moment-based Image Watermarking: Principles, Perspectives and Challenges**”, *Encyclopedia of Information Science and Technology*, (3rd Ed) Edited by Mehdi Khosrow-Pour, IGI Global, IGI Global, pp. 7202-7211, 2015. doi:10.4018/978-1-4666-5888-2.ch709.
- A.10** E.D. Tsougenis, G.A. Papakostas, “**Should We Consider Adaptivity in Moment-based Image Watermarking ?**”, in *Moments and Moment Invariants - Theory and Applications*, G.A. Papakostas (Ed.), Science Gate Publishing, GCSR vol. 1, pp. 253-274, 2014. doi: 10.15579/gcsr.vol1.ch11.
- A.9** G.A. Papakostas, “**Over 50 Years of Moments and Moment Invariants**”, in *Moments and Moment Invariants - Theory and Applications*, G.A. Papakostas (Ed.), Science Gate Publishing, GCSR vol. 1, pp. 3-32, 2014. doi: 10.15579/gcsr.vol1.ch1.
- A.8** E.G. Karakasis, G.A. Papakostas and D.E. Koulouriotis, “**Pattern Recognition Using Quaternion Color Moments**”, Chapter 5, pp. 153-176, in *Pattern Recognition: Practices, Perspectives and Challenges*, D.B. Vincent (Ed.), Nova Publishers, ISBN 978-1-62618-198-4, 2013.
- A.7** G.A. Papakostas, D.E. Koulouriotis and V.D. Tourassis, “**Feature Extraction Based on Wavelet Moments and Moment Invariants in Machine Vision Systems**”, in *Human-Centric Machine Vision*, F. Solari (Ed.), InTech, ISBN 978-953-51-0563-3, 2012.
- A.6** G.A. Papakostas, E.G. Karakasis and D.E. Koulouriotis, “**Orthogonal Image Moment Invariants: Highly Discriminative Features for Pattern Recognition Applications**”, Chapter 3, pp. 34-52, in *Cross-Disciplinary Applications of Artificial Intelligence and Pattern Recognition: Advancing Technologies*, Vijay Kumar Mago and Nitin Bhatia (Eds.), IGI Global, ISBN 978-1613504291, 2012.

- A.5 G.A. Papakostas, D.E. Koulouriotis, A.S. Polydoros and V.D. Tourassis, “**Evolutionary Feature Subset Selection for Pattern Recognition Applications**”, Chapter 23, pp. 443-458, in *Evolutionary Algorithms*, Eisuke Kita (Ed.), InTech, ISBN 978-953-307-171-8, 2011.
- A.4 G.A. Papakostas, D.E. Koulouriotis, E.G. Karakasis and V.D. Tourassis, “**A General Framework for Computation of Biomedical Image Moments**”, Chapter 23, pp. 449-460, in *Biomedical Engineering, Trends in Electronics, Communications and Software*, Anthony N. Laskovski (Ed.), InTech, ISBN 978-953-307-475-7, 2011.
- A.3 G.A. Papakostas and D.E. Koulouriotis, “**Classifying Patterns Using Fuzzy Cognitive Maps**” in *Fuzzy Cognitive Maps: Advances in Theory, Methodologies, Tools and Applications*, M. Glykas (Ed.), Springer, ISBN: 978-3-642-03219-6, 2010. (4 ετερο-αναφορές)
- A.2 G.A. Papakostas, D.E. Koulouriotis and E.G. Karakasis, “**Efficient 2-D DCT Computation from an Image Representation Point of View**”, Chapter 2, pp. 21-34, in *Image Processing*, InTech, ISBN 978-3-902613-44-8, 2009.
- A.1 G. Papakostas, D.A. Karras, Y. Boutalis, B.G. Mertzios, “**Efficient Computation of Moment Descriptors**”, in *Recent Advances in Applied Signals, Systems and Image Processing*, D.A. Karras (Ed.), Springer, ISBN: 978-1-4020-8169-9, 2009.

B. THESES

- B.3 G.A. Papakostas, “**Development of Intelligent Neural Classifiers for Computer Vision Applications**”, PhD Thesis, Democritus University of Thrace, Department of Electrical and Computer Engineering, 2007. Supervisor: Ass. Professor Y.S. Boutalis.
- B.2 G.A. Papakostas, “**Wavelet-based Feature Extraction for Pattern Recognition Applications**”, Master’s Thesis, Democritus University of Thrace, Department of Electrical and Computer Engineering, 2002. Supervisor: Professor B.G. Mertzios.
- B.1 G.A. Papakostas, “**Development of a Computer Vision Software Platform**”, Bachelor’s Thesis, Democritus University of Thrace, Department of Electrical and Computer Engineering, 1999. Supervisor: Ass. Professor Y.S. Boutalis.

C. JOURNAL PUBLICATIONS

- C.33 V.G. Kaburlasos and G.A. Papakostas, “**Learning Distributions of Image Features by Interactive Fuzzy Lattice Reasoning (FLR) in Pattern Recognition Applications**”, *IEEE Computational Intelligence Magazine*, vol.10, no.3, pp. 42-51, 2015.
- C.32 E.D. Tsougenis, G.A. Papakostas and D.E. Koulouriotis, “**Image Watermarking via Separable Moments**”, *Multimedia Tools and Applications*, vol. 74, no. 11, pp. 3985-4012, 2015.
- C.31 G.A. Papakostas, A. Savio, M. Grana and V.G. Kaburlasos, “**A Lattice Computing Approach to Alzheimer’s Disease Computer Assisted Diagnosis Based on MRI Data**”, *Neurocomputing*, vol. 150, Part A, pp. 37-42, 2015.
- C.30 E.D. Tsougenis, G.A. Papakostas, D.E. Koulouriotis and E.G. Karakasis, “**Adaptive Color Image Watermarking by the use of Quaternion Image Moments**”, *Expert Systems With Applications*, vol. 41, no. 14, pp. 6408-6418, 2014.
- C.29 S.E. Papadakis, V.G. Kaburlasos and G.A. Papakostas, “**Two Fuzzy Lattice Reasoning (FLR) Classifiers and Their Application for Human Facial Expression Recognition**”, *Journal of Multi-Valued Logic and Soft Computing*, vol. 22, no. 4-6, pp. 561-579, 2014.
- C.28 E.G. Karakasis, G.A. Papakostas, D.E. Koulouriotis and V.D. Tourassis, “**A Unified Methodology for Computing Accurate Quaternion Color Moments and Moment Invariants**”, *IEEE Transactions on Image Processing*, vol. 23, no. 2, pp. 596-611, 2014.
- C.27 G.A. Papakostas, E.D. Tsougenis, D.E. Koulouriotis and V.D. Tourassis, “**Moment-based Local Image Watermarking via Genetic Optimization**”, *Applied Mathematics and Computation*, vol. 227, pp. 222-236, 2014.
- C.26 V.G. Kaburlasos, S.E. Papadakis and G.A. Papakostas, “**A Lattice Computing Extension of the FAM Neural Classifier for Human Facial Expression Recognition**”, *IEEE Transactions on Neural Networks & Learning Systems*, vol. 24, no. 10, pp. 1526 - 1538, 2013.
- C.25 G.A. Papakostas, A.G. Hatzimichailidis and V.G. Kaburlasos, “**Distance and similarity measures between intuitionistic fuzzy sets: A comparative analysis from a pattern recognition point of view**”, *Pattern Recognition Letters*, vol. 34, no. 14, pp. 1609-1622, 2013.
- C.24 E.D. Tsougenis, G.A. Papakostas, D.E. Koulouriotis and V.D. Tourassis, “**Towards Adaptivity of Image Watermarking in Polar Harmonic Transforms Domain**”, *Optics & Laser Technology*, vol. 54, pp. 84-97, 2013.

- C.23 E.G. Karakasis, G.A. Papakostas, D.E. Koulouriotis and V.D. Tourassis, “**Generalized Dual Hahn Moment Invariants**”, *Pattern Recognition*, vol. 46, no. 7, pp. 1998-2014, 2013.
- C.22 M.K. Ketipi, D.E. Koulouriotis, E.G. Karakasis, G.A. Papakostas and V.D. Tourassis, “**A Flexible Nonlinear Approach for Representing Cause-Effect Relationships in FCMs**”, *Applied Soft Computing*, vol. 12, no. 12, pp. 3757-3770, 2012.
- C.21 G.A. Papakostas, E.G. Karakasis, D.E. Koulouriotis and V.D. Tourassis, “**Moment-Based Local Binary Patterns: A Novel Local Descriptor for Invariant Pattern Recognition Applications**”, *Neurocomputing*, vol. 99, no. 1, pp. 358-371, 2013.
- C.20 E.D. Tsougenis, G.A. Papakostas, D.E. Koulouriotis and V.D. Tourassis, “**Performance Evaluation of Moment-Based Watermarking Methods: A Review**”, *Journal of Systems and Software*, vol. 85, no. 8, pp. 1864-1884, 2012.
- C.19 G.A. Papakostas, D.E. Koulouriotis, A.S. Polydoros and V.D. Tourassis, “**Towards Hebbian Learning of Fuzzy Cognitive Maps in Pattern Classification Problems**”, *Expert Systems with Applications*, vol. 39, no. 12, pp. 10620-10629, 2012.
- C.18 A.G. Hatzimichailidis, G.A. Papakostas and V.G. Kaburlasos, “**A Novel Distance Measure of Intuitionistic Fuzzy Sets and its Application to Pattern Recognition Applications**”, *International Journal of Intelligent Systems*, vol. 27, no. 4, pp. 396-409, 2012.
- C.17 G.A. Papakostas, D.A. Karras, B.G. Mertzios, D. van Ormondt, and D. Graveron-Demilly, “**In vivo MRS Metabolites Quantification Using Evolutionary Optimization**”, *Measurement Science and Technology*, vol. 22, no. 11, 114004 (9pp), 2011.
- C.16 G.A. Papakostas, E.D. Tsougenis, D.E. Koulouriotis and V.D. Tourassis, “**On the Robustness of Harris Detector in Image Watermarking Attacks**”, *Optics Communications*, vol. 284, no. 19, pp. 4394-4407, 2011.
- C.15 G.A. Papakostas, D.E. Koulouriotis and E.G. Karakasis, “**Computation Strategies of Orthogonal Image Moments: A Comparative Study**”, *Applied Mathematics and Computation*, vol. 216, no. 1, pp. 1-17, 2010.
- C.14 G.A. Papakostas, Y.S. Boutalis, D.A. Karras, and B.G. Mertzios, “**Efficient Computation of Zernike and Pseudo-Zernike Moments for Pattern Classification Applications**”, *Pattern Recognition and Image Analysis*, vol. 20, no.1, pp. 56-64, 2010.

- C.13** G.A. Papakostas, E.G. Karakasis and D.E. Koulouriotis, “**Accurate and Speedy Computation of Image Legendre Moments for Computer Vision Applications**”, *Image and Vision Computing*, vol. 28, no. 3, pp. 414-423, 2010.
- C.12** G.A. Papakostas, E.G. Karakasis and D.E. Koulouriotis, “**Novel Moment Invariants for Improved Classification Performance in Computer Vision Applications**”, *Pattern Recognition*, vol. 43, no. 1, pp. 58-68, 2010.
- C.11** G.A. Papakostas, D.E. Koulouriotis and E.G. Karakasis, “**A Unified Methodology for Efficient Computation of Discrete Orthogonal Image Moments**”, *Information Sciences*, vol. 179, no. 20, pp. 3619-3633, 2009.
- C.10** G.A. Papakostas, Y.S. Boutalis, D.A. Karras, and B.G. Mertzios, “**Modified Factorial Free Direct Methods for Zernike and Pseudo-Zernike Moments Computation**”, *IEEE Trans. on Instrumentation and Measurement*, vol. 58, no. 7, pp. 2121-2131, 2009.
- C.9** G.A. Papakostas, Y.S. Boutalis, D.A. Karras and B.G. Mertzios, “**Pattern Classification by Using Improved Wavelet Compressed Zernike Moments**”, *Applied Mathematics and Computation*, vol. 212, no. 1, pp. 162-176, 2009.
- C.8** G.A. Papakostas, Y.S. Boutalis, D.E. Koulouriotis and B.G. Mertzios, “**Fuzzy Cognitive Maps for Pattern Recognition Applications**”, *International Journal of Pattern Recognition and Artificial Intelligence*, vol. 22, no. 8, pp. 1461-1468, 2008.
- C.7** G.A. Papakostas, E.G. Karakasis and D.E. Koulouriotis, “**Efficient and Accurate Computation of Geometric Moments on Gray-Scale Images**”, *Pattern Recognition*, vol. 41, no. 6, pp. 1895-1904, 2008.
- C.6** G.A. Papakostas, Y.S. Boutalis, C.N. Papaodysseus and D.K. Fragoulis, “**Numerical Stability of Fast Computation Algorithms of Zernike Moments**”, *Applied Mathematics and Computation*, vol. 195, no. 1, pp. 326-345, 2008.
- C.5** G.A. Papakostas, Y.S. Boutalis, S.T. Samartzidis, D.A. Karras and B.G. Mertzios, “**Two-Stage Hybrid Tuning Algorithm for Training Neural Networks in Image Vision Applications**”, *International Journal of Signal and Imaging Systems Engineering*, vol. 1, no. 1, pp. 58-67, 2008.
- C.4** G.A. Papakostas, Y.S. Boutalis, D.A. Karras, and B.G. Mertzios, “**Fast Numerically Stable Computation of Orthogonal Fourier-Mellin Moments**”, *IET Computer Vision*, vol.1, no. 1, pp. 11-16, 2007.

- C.3 G.A. Papakostas, Y.S. Boutalis, D.A. Karras, and B.G. Mertzios, “**A New Class of Zernike Moments for Computer Vision Applications**”, *Information Sciences*, vol. 177, no.13, pp. 2802-2819, 2007. (Impact Factor = 2.150) 49 ετερο-αναφορές
- C.2 G.A. Papakostas, Y.S. Boutalis, C.N. Papaodysseus and D.K. Fragoulis, “**Numerical Error Analysis in Zernike Moments Computation**” *Image and Vision Computing*, vol. 24, no. 9, pp. 960-969, 2006.
- C.1 G.A. Papakostas, D.A. Karras, B.G. Mertzios and Y.S. Boutalis, “**An Efficient Feature Extraction Methodology for Computer Vision Applications using Wavelet Compressed Zernike Moments**”, *ICGST International Journal on Graphics, Vision and Image Processing, Special Issue: Wavelets and Their Applications*, vol. SI1, pp. 5-15, 2005.

D. INTERNATIONAL CONFERENCE PAPERS

- D.34 G.A. Papakostas, E.I. Papageorgiou and V.G. Kaburlasos, “**Linguistic Fuzzy Cognitive Map (LFCM) for Pattern Recognition**”, *IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2015)*, pp., 2-5 August, Istanbul - Turkey, 2015, **under presentation**.
- D.33 G.A. Papakostas and K.I. Diamantaras, “**Efficient Data Classification by GPU-Accelerated Linear Mean Squared Slack Minimization**”, *IEEE International Workshop on Machine Learning for Signal Processing (MLSP 2014)*, pp.1-6, 21-24 September, Reims-France, 2014.
- D.32 G.A. Papakostas and V.G. Kaburlasos, “**Lattice Computing (LC) Meta-representation for Pattern Classification**”, *IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2014)*, pp. 39-44, 6-11 July, Beijing - China, 2014.
- D.31 E.D. Tsougenis, G.A. Papakostas, D.E. Koulouriotis, E.G. Karakasis and D.A. Karras, “**Color Image Watermarking via Quaternion Radial Tchebichef Moments**”, *IEEE International Workshop on Imaging Systems and Techniques (IST'13)*, 22-23 October, Beijing – China, 2013.
- D.30 V.G. Kaburlasos, G.A. Papakostas, Th. Pachidis and A. Athinellis, “**Intervals' Numbers (INs) Interpolation/Extrapolation**”, *IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2013)*, pp. 1-8, 7-10 July, 2013, Hyderabad - India.
- D.29 G.A. Papakostas, V.G. Kaburlasos and Th. Pachidis, “**Thermal Infrared Face Recognition Based on Lattice Computing (LC) Techniques**”, *IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2013)*, pp. 1-6, 7-10 July, Hyderabad - India, 2013.

- D.28** K.M. Hosny, G.A. Papakostas and D.E. Koulouriotis, “**Accurate Reconstruction of Noisy Medical Images Using Orthogonal Moments**”, *Proceedings of the 18th International Conference on Digital Signal Processing (DSP’13)*, pp. 1-6, 1-3 July, Santorini - Greece, 2013.
- D.27** E.D. Tsougenis, G.A. Papakostas and D.E. Koulouriotis, “**Introducing the Separable Moments for Image Watermarking in a Totally Moment-Oriented Framework**”, *Proceedings of the 18th International Conference on Digital Signal Processing (DSP’13)*, pp. 1-6, 1-3 July, Santorini - Greece, 2013.
- D.26** A.G. Hatzimichailidis, G.A. Papakostas and V.G. Kaburlasos, “**A Study on D-Implications**”, *Proceedings of the 10th International FLINS Conference on Uncertainty Modeling in Knowledge Engineering and Decision Making (FLINS 2012)*, 26-29 August 2012, Istanbul, Turkey, pp. 708-713, 2012.
- D.25** S.E. Papadakis, V.G. Kaburlasos and G.A. Papakostas, “**Fuzzy lattice reasoning (FLR) classifier for human facial expression recognition**”, *Proceedings of the 10th International FLINS Conference on Uncertainty Modeling in Knowledge Engineering and Decision Making (FLINS 2012)*, 26-29 August 2012, Istanbul, Turkey, pp. 633-638, 2012.
- D.24** E.D. Tsougenis, G.A. Papakostas, D.E. Koulouriotis and V.D. Tourassis, “**Image Watermarking in Polar Harmonic Transforms Domain**”, *Proceedings of the 19th International Workshop on Systems, Signals and Image Processing (IWSSIP’12)*, ISBN 978-3-200-02588-2, 11-13 April, Vienna - Austria, 2012.
- D.23** M.K. Ketipi, D.E. Koulouriotis, E.G. Karakasis, G.A. Papakostas and V.D. Tourassis, “**Nonlinear Cause-Effect Relationships in Fuzzy Cognitive Maps**”, *IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2011)*, pp. 836-843, 27-30 June, 2011, Taipei-Taiwan.
- D.22** G.A. Papakostas, A.S. Polydoros, D.E. Koulouriotis and V.D. Tourassis, “**Training Fuzzy Cognitive Maps by Using Hebbian Learning Algorithms: A Comparative Study**”, *IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2011)*, pp. 851-858, 27-30 June, 2011, Taipei-Taiwan.
- D.21** G.A. Papakostas, D.A. Karras, B.G. Mertzios, D. Graveron-Demilly and D.van Ormondt, “**A Constrained Genetic Algorithm with Adaptively Defined Fitness Function in MRS Quantification**”, *International Conference on Grid and Distributed Computing, Control and Automation, (CGD/CA’10)*, pp. 257-268, 13-15 December 2010, Jeju Island – Korea.

- D.20** G.A. Papakostas, D.A. Karras, B.G. Mertzios, D.van Ormondt and D. Graveron-Demilly, “**On Quantifying MRS Metabolites Using a Constrained Genetic Algorithm**”, *IEEE International Workshop on Imaging Systems and Techniques (IST'10)*, pp. 46-51, 1-2 July 2010, Thessaloniki – Greece.
- D.19** G.A. Papakostas, E.D. Tsougenis and D.E. Koulouriotis, “**Near Optimum Local Image Watermarking Using Krawtchouk Moments**”, *IEEE International Workshop on Imaging Systems and Techniques (IST'10)*, pp. 464-467, 1-2 July 2010, Thessaloniki – Greece. (6 ετερο-αναφορές)
- D.18** G.A. Papakostas, E.G. Karakasis and D.E. Koulouriotis, “**Computing Orthogonal Moments in Biomedical Imaging**”, pp. 1-4, *16th International Workshop on Systems, Signals and Image Processing (IWSSIP'09)*, 18-20 June 2009, Chalkida – Greece.
- D.17** G.A. Papakostas, D.A. Karras and B.G. Mertzios, “**Performance of the Orthogonal Moments in Reconstructing Biomedical Images**”, pp. 1-4, *16th International Workshop on Systems, Signals and Image Processing (IWSSIP'09)*, 18-20 June 2009, Chalkida – Greece.
- D.16** G.A. Papakostas, D.A. Karras and B.G. Mertzios, “**Dealing with Peaks Overlapping Issue in Quantifying Human Brain Metabolites of MRSI**”, *IEEE International Workshop on Imaging Systems and Techniques (IST'09)*, pp. 58-62, 11-12 May 2009, Shenzhen – China.
- D.15** G.A. Papakostas, E.G. Karakasis and D.E. Koulouriotis, “**On Accelerating the Computation of 2-D Discrete Cosine Transform in Image Processing**”, *International Conference on Signals and Electronic Systems (ICSES'08)*, pp. 7-10, 14-17 September 2008, Krakow – Poland.
- D.14** G.A. Papakostas, D.A. Karras, B.G. Mertzios and Y.S. Boutalis, “**An Efficient Invariant Image Recognition Methodology Using Wavelet Compressed Zernike Moments Denoised Through Self Organizing Maps**”, *IEEE International Workshop on Imaging Systems and Techniques (IST'07)*, pp. 1-6, 4-5 May 2007, Krakow – Poland.
- D.13** G.A. Papakostas, Y.S. Boutalis, D.A. Karras and B.G. Mertzios, “**Highly Compressed Zernike Moments by Smoothing**” *14th International Workshop on Systems, Signals and Image Processing (IWSSIP'07)*, pp. 213-216, 27-30 June 2007, Maribor – Slovenia.
- D.12** G.A. Papakostas, Y.S. Boutalis, D.A. Karras and B.G. Mertzios, “**Fast Computation of Orthogonal Fourier-Mellin Moments Using Modified Direct Method**”, *14th International Workshop on Systems, Signals and Image Processing (IWSSIP'07)*, pp. 161-164, 27-30 June 2007, Maribor – Slovenia.

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- D.10** G.A. Papakostas, Y.S. Boutalis, D.E. Koulouriotis and B.G. Mertzios, “**A First Study of Pattern Recognition by Using Fuzzy Cognitive Maps**”, *13th International Workshop on Systems, Signals and Image Processing (IWSSIP’06)*, pp. 369-374, 21-23 September 2006, Budapest – Hungary.
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- D.8** G.A. Papakostas, Y.S. Boutalis, S.T. Samartzidis, D.A. Karras and B.G. Mertzios, “**Combining Backpropagation and Genetic Algorithms to Train Neural Networks**”, *12th International Workshop on Systems, Signals and Image Processing (IWSSIP’05)*, pp. 171-177, 22-24 September 2005, Chalkida – Greece.
- D.7** G.A. Papakostas, Y.S. Boutalis, D.A. Karras and B.G. Mertzios, “**An Exploration Measure of the Diversity Variation in Genetic Algorithms**”, *2nd International Conference on Informatics in Control, Automation and Robotics (ICINCO’05)*, pp. 260-265, 14-17 September, Barcelona – Spain.
- D.6** G.A. Papakostas, Y.S. Boutalis, D.A. Karras, and B.G. Mertzios, “**On the Reconstruction Performance of Compressed Orthogonal Moments**”, *1st International Conference on Informatics in Control, Automation and Robotics (ICINCO’04)*, pp. 468-474, 25-28 August 2004, Setubal – Portugal.
- D.5** G.A. Papakostas, O.I. Kosmidou and I.E. Antonakis, “**An LMI-Based Genetic Algorithm for Guaranteed Cost Control**”, *1st International Conference on Informatics in Control, Automation and Robotics (ICINCO’04)*, pp. 327-333, 25-28 August 2004, Setubal – Portugal.
- D.4** M. Dasygenis, E. Brockmeyer, D. Soudris, F. Catthoor, A. Thanailakis and G. Papakostas, “**Performance and Energy Optimization of Multimedia Applications Using DMA Combined with Prefetch**”, *Workshop on Compilers and Operating Systems for Low Power (COLP’03)*, 27 September 2003, New Orleans, Louisiana – USA.
- D.3** G.A. Papakostas, Y.S. Boutalis and B.G. Mertzios, “**Evolutionary Selection of Zernike Moment Sets In Image Processing**”, *10th International Workshop on Systems, Signals and Image Processing (IWSSIP’03)*, 10-11 September 2003, Prague – Czech Republic.

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- D.1** O.I. Kosmidou, G.A. Papakostas and G.D. Tampakis, “**Robust Multiple Objective Control by Using LMI Optimization**”, *European Control Conference (ECC2001)*, pp. 713-716, 4-7 September 2001, Porto-Portugal.

9. PROFESSIONAL SERVICE

Member of Scientific Communities

- Technical Chamber of Greece (T.E.E.) since 03/2000.
- Panhellenic Association of Mechanical and Electrical Engineers (P.S.M.H.-M.), since 2000.
- Hellenic Association of Computer and Information Scientists (EPY) since 2003.
- EUCIP Hellas - Computer Skills Degrees, since 2004.
- Vellum Educational Services – Cambridge Computer Skills Degrees, since 2005.
- International Association of Engineers (IAENG)
- Machine Intelligence Research Labs (MIR Labs)
 - Profile - <http://www.mirlabs.net/global/index.php?c=main&a=person&id=653>
- European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics (EUCog III)
 - Profile - <http://www.eucognition.org/eucog-wiki/User:2116>

Editorial Membership (Journal /Publisher)

Editor-in-Chief

Gate to Computer Vision and Pattern Recognition / Science Gate Publishing
Gate to Computational Intelligence and Soft Computing / Science Gate Publishing

Associate Editor

International Journal of Humanitarian Technology / Inderscience

Reviewer

IEEE Trans. on Image Processing / IEEE
IEEE Trans. on Neural Networks and Learning Systems / IEEE
IEEE Trans. on Fuzzy Systems / IEEE
Pattern Recognition / Elsevier
Information Sciences / Elsevier
Image and Vision Computing / Elsevier
Pattern Recognition Letters / Elsevier
Neurocomputing / Elsevier
Applied Mathematical Modelling / Elsevier
Journal of Visual Communication and Image Representation / Elsevier
Journal of Electronic Imaging / SPIE
Applied Soft Computing / Elsevier
Optics & Lasers in Engineering / Elsevier
IET Image Processing / IET
IET Computer Vision / IET
Machine Vision and Applications / Springer
Circuits Systems and Signal Processing / Springer
Journal of Real-Time Image Processing / Springer

Conference Referee

International Workshop on Systems, Signals and Image Processing (IWSSIP) - 2011
World Congress on Nature and Biologically Inspired Computing (NaBIC) - 2011-14
International Joint Conference on Neural Networks (IJCNN) - 2011-2014
World Congress on Information and Communication Technologies (WICT) - 2012-14
IEEE International Conference on Imaging Systems and Techniques (IST) - 2010
International Conference on Hybrid Artificial Intelligence Systems (HAIS) - 2010-14
European Signal Processing Conference (EUSIPCO) - 2007

10. PUBLICATIONS QUALITY AND CITATIONS

Citations on my research are retrieved through ScholarGoogle and Scopus tools as follows:

Google Scholar - **Citations** 796, **h-index** 16, **i10-index** 24,

Link: <http://scholar.google.com/citations?user=O9d4j7oAAAAJ&hl=el&oi=ao>

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