

Curriculum Vitae
Dr. George A. Papakostas
Professor

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1. PERSONAL INFORMATION

Name:	George
Surname:	Papakostas
Middle Name:	Athanasios
Country of Citizenship:	Greece
e-mail:	gpapak@cs.ihu.gr / gpapak@teiemt.gr
Academic Affiliation	Department of Computer Science, International Hellenic University, Agios Loukas, Kavala, Greece

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
- Python
- C, C++, Python, Pascal, Delphi, 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. ACADEMIC TEACHING EXPERIENCE

DURATION	EMPLOYER	DESCRIPTION
2019 -	International Hellenic University / Department of Computer Science	Position: Tenured Full Professor Lessons: 1) Data Structures and Algorithms 2) Computer Vision 3) Parallel and Distributed Computing 4) Pattern recognition 5) Machine Learning
2016 - 2019	Technological Educational Institute (TEI) of Eastern Macedonia & Thrace / Department of Computer and Informatics Engineering	Position: Tenured Full Professor Lessons: 1) Data Structures and Algorithms 2) Computer Vision 3) Parallel and Distributed Computing 4) Pattern recognition
2006 - 2015	Technological Educational Institute (TEI) of Eastern Macedonia & Thrace /	Position: Adjunct Assistant Professor Lessons: 1) Introduction to Software

	Department of Computer and Informatics Engineering	<p>Engineering</p> <ol style="list-style-type: none"> 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	<p>Position: Teaching Assistant</p> <p>Lessons:</p> <ol style="list-style-type: none"> 1) Robotics 2) Computational Intelligence 3) Control Systems I 4) Control Systems II

6. ACADEMIC ADMINISTRATIVE EXPERIENCE

DURATION	RESEARCH PROJECT
2021 -	Deputy Dean of the Faculty of Sciences / International Hellenic University
2021 -	Head of the Department of Computer Science / International Hellenic University
2021 -	Founder and Group Leader of the Machine Learning and Vision Research Group / International Hellenic University
2019 -	Director of the MPhil program “Advanced Technologies in Informatics and Computers” – Hosted by Department of Computer Science / International Hellenic University
2019 -2021	Deputy Director of the Department of Computer Science / International Hellenic University
2015 - 2021	Head of the Visual Computing Division / HUMAIN-Lab / International Hellenic University
2017 – 2019	Deputy Director of the Department of Computer and Informatics Engineering / Technological Educational Institute (TEI) of Eastern Macedonia & Thrace
2016 - 2019	Director of the Msc program “Advanced Technologies in Informatics and

	Computers” – Hosted by Department of Computer and Informatics Engineering / Technological Educational Institute (TEI) of Eastern Macedonia & Thrace
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7. RESEARCH EXPERIENCE

DURATION	RESEARCH PROJECT
01/07/2020 – 31/12/2022	“Computer Vision Algorithm for Crack Detection in Marble Plates”. Subcontract of the project “THERMOBOT”. “RESEARCH – DEVELOP – INNOVATE”, cycle A, Intervention II, Operational Programme “Competitiveness, Entrepreneurship and Innovation”, NSRF (National Strategic Reference Framework) 2014-2020 Project No. T2EAK-00238 Coordinator: Prof. George Papakostas (Greece)
26/07/2018 – 31/06/2022	“Computer Vision Algorithm for Quality Inspection of Marble Plates”. Subcontract of the project “Automation of the Optical Screening of Marble Tiles – OPTIMAR”. “RESEARCH – DEVELOP – INNOVATE”, cycle A, Intervention II, Operational Programme “Competitiveness, Entrepreneurship and Innovation”, NSRF (National Strategic Reference Framework) 2014-2020 Project No. T1EAK-00076 Coordinator: Prof. George Papakostas (Greece)
26/07/2018 – 31/06/2021	“Personalized Optimal Grape Harvest by Autonomous Robot”. RESEARCH – DEVELOP – INNOVATE”, cycle A, Intervention II, Operational Programme “Competitiveness, Entrepreneurship and Innovation”, NSRF (National Strategic Reference Framework) 2014-2020 Project No. T1EAK-00300 Coordinator: Prof. Vassilis Kaburlasos (Greece)
26/07/2018 – 31/06/2021	“Social Robots as Tools in Special Education”. RESEARCH – DEVELOP – INNOVATE”, cycle A, Intervention II, Operational Programme “Competitiveness, Entrepreneurship and Innovation”, NSRF (National Strategic Reference Framework) 2014-2020 Project No. T1EAK-00929 Coordinator: Prof. Vassilis Kaburlasos (Greece)
01/01/2018-31/12/2021	“Cyber Physical Systems for PEdagogical Rehabilitation in Special Education”. H2020-MSCA-RISE-2017 (Marie Skłodowska-Curie Research and Innovation Staff. Project No. 777720 Coordinator: Prof. Manuel Grana (Spain)
01/01/2018 – 31/12/2018	“Increasing the well being of the population by RObotic and ICT based iNNovative education”. EU Danube Strategic Project Fund (DSPF), Interreg Danube Transnational Programme. Project No. 07_ECVII_PA07_RONNI Coordinator: Prof. Snezhana Kostova (Bulgaria)
01/05/2014 – 30/09/2015	Thalis (MIS 380292): “Study and Forecasting of Economic Data using Machine Learning Methods”. Co-funded by the European Union (European Social Fund)

	and national resources. Coordinator: Ass. Prof. T. Papadimitriou
01/01/2014 – 31/12/2014	Thalis (MIS 375233): “NANOCAPILLARY” research project, co-funded by the European Union (European Social Fund) and national resources. Coordinator: Prof. A.Ch. Mitropoulos
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	TSMEDe national program. “Comparative Analysis of Morphological and Coordinate Logic Filters and their Development into an Image Processing Software Platform.

8. PUBLICATIONS

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

A. BOOK CHAPTERS

- A.15** T.V. Maliamanis and G.A. Papakostas, “**Machine Learning Vulnerability in Medical Imaging**”, in *Machine Learning, Big Data, and IoT for Medical Informatics*, P. Kumar, Y. Kumar, M.A. Tawhid (Eds.), Elsevier, pp. 1-18, 2021.
- A.14** A.G. Hatzimichailidis, G.A. Papakostas, and V.G. Kaburlasos, “**On Constructing Distance and Similarity Measures based on Fuzzy Implications**”, in *Handbook of Fuzzy Sets Comparison - Theory, Algorithms and Applications*, G.A. Papakostas, A.G. Hatzimichailidis, V.G. Kaburlasos (Eds.), GCSR vol. 6, pp. 1-21, Science Gate Publishing, 2016.
- 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, vol. A, pp. 537-560, 2015.
- 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.
- 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. BOOKS-THESES

- B.4 V.G. Kaburlasos, G.A. Papakostas, «**Introduction to Computational Intelligence - A Holistic Approach** », (in greek), *ΣΥΝΔΕΣΜΟΣ ΕΛΛΗΝΙΚΩΝ ΑΚΑΔΗΜΑΪΚΩΝ ΒΙΒΛΙΟΘΗΚΩΝ*, ISBN 978-960-603-078-9, 2016.
(<http://hdl.handle.net/11419/3443>)
- 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.77 S. Tsimenidis, E. Vrochidou, and G. A. Papakostas, “**Omics Data and Data Representations for Deep Learning-Based Predictive Modeling**,” *International Journal of Molecular Sciences*, vol. 23, no. 20, p. 12272, Oct. 2022, doi: 10.3390/ijms232012272.

- C.76 T.V. Maliamanis, K.D. Apostolidis, and G.A. Papakostas, “**How Resilient Are Deep Learning Models in Medical Image Analysis? The Case of the Moment-Based Adversarial Attack (Mb-AdA)**,” *Biomedicines*, vol. 10, no. 10, p. 2545, Oct. 2022, doi: 10.3390/biomedicines10102545.
- C.75 E. Vrochidou, G.K. Sidiropoulos, A.G. Ouzounis, A. Lampoglou, I. Tsimperidis, G.A. Papakostas, I.T. Sarafis, V. Kalpakis, A. Stamkos, “**Towards Robotic Marble Resin Application: Crack Detection on Marble Using Deep Learning**,” *Electronics*, vol. 11, no. 20, p. 3289, Oct. 2022, doi: 10.3390/electronics11203289.
- C.74 K.A. Tychola, I. Tsimperidis, and G.A. Papakostas, “**On 3D Reconstruction Using RGB-D Cameras**,” *Digital*, vol. 2, no. 3, pp. 401–421, Aug. 2022, doi: 10.3390/digital2030022.
- C.73 M.-C. Malamatinos, E. Vrochidou, and G.A. Papakostas, “**On Predicting Soccer Outcomes in the Greek League Using Machine Learning**,” *Computers*, vol. 11, no. 9, p. 133, Aug. 2022, doi: 10.3390/computers11090133.
- C.72 G.K. Sidiropoulos, A.G. Ouzounis, G.A. Papakostas, A. Lampoglou, I.T. Sarafis, A. Stamkos, and G. Solakis., “**Hand-Crafted and Learned Feature Aggregation for Visual Marble Tiles Screening**,” *Journal of Imaging*, vol. 8, no. 7, p. 191, Jul. 2022, doi: 10.3390/jimaging8070191.
- C.71 G. G. Samatas and G. A. Papakostas, “**Biometrics: Going 3D**,” *Sensors*, vol. 22, no. 17, p. 6364, Aug. 2022, doi: 10.3390/s22176364.
- C.70 I. Patsakos, E. Vrochidou, and G.A. Papakostas, “**A Survey on Deep Learning for Building Load Forecasting**,” *Mathematical Problems in Engineering*, vol. 2022, Article ID 1008491, 2022.
- C.69 K.D. Apostolidis and G.A. Papakostas, “**Digital Watermarking as an Adversarial Attack on Medical Image Analysis with Deep Learning**,” *Journal of Imaging*, vol. 8, no. 6, p. 155, 2022.
- C.68 G.K. Sidiropoulos, N. Diamianos, K.D. Apostolidis, and G.A. Papakostas, “**Text Classification Using Intuitionistic Fuzzy Set Measures—An Evaluation Study**,” *Information*, vol. 13, no. 5, p. 235, 2022.
- C.67 S.S. Moumgiakmas and G.A. Papakostas, “**Robustly Effective Approaches on Motor Imagery-Based Brain Computer Interfaces**,” *Computers*, vol. 11, no. 5, p. 61, 2022.
- C.66 E. Vrochidou, D. Oustadakis, A. Kefalas, and G.A. Papakostas, “**Computer Vision in Self-Steering Tractors**,” *Machines*, vol. 10, no. 2, p. 129, 2022.
- C.65 G.K. Sidiropoulos, K.D. Apostolidis, N. Damianos, and G.A. Papakostas, “**FsmSpy: A Fuzzy Set Measures Python Library**,” *Information*, vol. 13, no. 2, p. 64, 2022.
- C.64 C. Lytridis, V.G. Kaburlasos, C. Bazinas, G.A. Papakostas, G. Sidiropoulos, V.-A. Nikopoulou, V. Holeva, M. Papadopoulou, A. Evangeliou, “**Behavioral Data Analysis of Robot-Assisted Autism Spectrum Disorder (ASD) Interventions Based on Lattice Computing Techniques**,” *Sensors*, vol. 22, no. 2, p. 621, 2022.

- C.63** G.P. Avramidis, M.P. Avramidou and G.A. Papakostas, “**Rheumatoid Arthritis Diagnosis: Deep Learning vs. Humane**,” *Applied Sciences*, vol. 12, no. 1, p. 10, 2022.
- C.62** K.M Hosny, T. Magdy, N.A. Lashin, K. Apostolidis, and G.A. Papakostas, “**Refined Color Texture Classification Using CNN and Local Binary Pattern**,” *Mathematical Problems in Engineering*, vol. 2021, Article ID 5567489, 15 pages, 2021.
- C.61** V.G. Kaburlasos, C. Lytridis, E. Vrochidou, C. Bazinas, G.A. Papakostas, A. Lekova, O. Bouattane, M. Youssfi, and T. Hashimoto, “**Granule-Based-Classifier (GbC): A Lattice Computing Scheme Applied on Tree Data Structures**,” *Mathematics*, vol. 9, no. 22, p. 2889, 2021.
- C.60** A.G. Ouzounis and G.A. Papakostas, “**Machine Learning in Discriminating Active Volcanoes of the Hellenic Volcanic Arc**,” *Applied Sciences*, vol. 11, no. 18, p. 8318, 2021.
- C.59** E. Vrochidou, C. Bazinas, M. Manios, G. A. Papakostas, T.P. Pachidis, and V.G. Kaburlasos, “**Machine Vision for Ripeness Estimation in Viticulture Automation**,” *Horticulturae*, vol. 7, no. 9, p. 282, 2021.
- C.58** K.D. Apostolidis, and G.A. Papakostas, “**A Survey on Adversarial Deep Learning Robustness in Medical Image Analysis**,” *Electronics*, vol. 10, no. 17, p. 2132, 2021.
- C.57** V. Holeva, V.-A. Nikopoulou, P. Kechayas, M.-D. Kerasidou, M. Papadopoulou, G.A. Papakostas, V.G. Kaburlasos, and A. Evangeliou, “**Robot-assisted Relaxation Training for Children with Autism Spectrum Disorders**,” *International Journal of Psychological and Behavioral Sciences*, vol. 15, no. 8, 711-714, 2021.
- C.56** N.S.T. Hirata and G.A. Papakostas, “**On Machine-Learning Morphological Image Operators**,” *Mathematics*, vol. 9, no. 16, p. 1854, 2021.
- C.55** S.S. Moumgiakmas, G.G. Samatas, and G.A. Papakostas, “**Computer Vision for Fire Detection on UAVs—From Software to Hardware**,” *Future Internet*, vol. 13, no. 8, p. 200, 2021.
- C.54** E. Badeka, T. Kalampokas, E. Vrochidou, K. Tziridis, G.A. Papakostas, T.P. Pachidis, V.G. Kaburlasos, “**Vision-based Vineyard Trunk Detection and its Integration into a Grapes Harvesting Robot**,” *International Journal of Mechanical Engineering and Robotics Research*, vol. 10, no. 7, pp. 374-385, 2021.

- C.53 G.A. Papakostas, G.K. Sidiropoulos, C.I. Papadopoulou, E. Vrochidou, V.G. Kaburlasos, M.T. Papadopoulou, V. Holeva, V.-A. Nikopoulou, and N. Dalivigkas, “**Social Robots in Special Education: A Systematic Review**,” *Electronics*, vol. 10, no. 12, p. 1398, 2021.
- C.52 G.A. Papakostas, G.K. Sidiropoulos, C. Lytridis, C. Bazinas, V.G. Kaburlasos, E. Kourampa, E. Karageorgiou, P. Kechayas and M.T. Papadopoulou, “**Estimating Children Engagement Interacting with Robots in Special Education Using Machine Learning**,” *Mathematical Problems in Engineering*, vol. 2021, Article ID 9955212, 10 pages, 2021.
- C.51 T. Kalampokas, E. Vrochidou, G.A. Papakostas, T. Pachidis, V.G. Kaburlasos, “**Grape stem detection using regression convolutional neural networks**,” *Computers and Electronics in Agriculture*, vol. 186, p. 106220, 2021.
- C.50 G.K. Sidiropoulos, P. Kiratsa, P. Chatzipetrou, and G.A. Papakostas, “**Feature Extraction for Finger-Vein-Based Identity Recognition**,” *Journal of Imaging*, vol. 7, no. 5, p. 89, 2021.
- C.49 E. Vrochidou, C. Lytridis, C. Bazinas, G.A. Papakostas, H. Wagatsuma, and V.G. Kaburlasos, “**Brain Signals Classification Based on Fuzzy Lattice Reasoning**,” *Mathematics*, vol. 9, no. 9, p. 1063, 2021.
- C.48 E. Vrochidou, K. Tziridis, A. Nikolaou, T. Kalampokas, G.A. Papakostas, T.P. Pachidis, S. Mamalis, S. Koundouras, and V.G. Kaburlasos, “**An Autonomous Grape-Harvester Robot: Integrated System Architecture**,” *Electronics*, vol. 10, no. 9, p. 1056, 2021.
- C.47 K.M. Hosny, S.T. Kamal, M.M. Darwish, and G.A. Papakostas, “**New Image Encryption Algorithm Using Hyperchaotic System and Fibonacci Q-Matrix**,” *Electronics*, vol. 10, no. 9, p. 1066, 2021.
- C.46 V. Kanakaris and G.A. Papakostas, “**Internet of things protocols - a survey**,” *International Journal of Humanitarian Technology*, vol. 1, no. 2, pp. 101-117, 2021. DOI 10.1504/IJHT.2020.112449.
- C.45 J. Musić, M. Bonković, S. Kružić, T. Marasović, V. Papić, S. Kostova, M. Dimitrova, S. Saeva, M. Zamfrov, V. Kaburlasos, E. Vrochidou, G. Papakostas, T. Pachidis, “**Robotics and information technologies in education: four countries from Alpe-Adria-Danube Region survey**,” *International Journal of Technology and Design Education*, 2020. <https://doi.org/10.1007/s10798-020-09631-9>

- C.44** V.A. Nikopoulou, V. Holeva, M.D. Kerasidou, P. Kechayas, M. Papadopoulou, E. Vrochidou, G.A. Papakostas, V.G. Kaburlasos, “**Identifying linguistic cues towards developing robots with empathy in autism interventions**,” *J Clin Med Kaz*, vol. 2, no. 56, pp. 27-33, 2020.
- C.43** C. Lytridis, C. Bazinas, G. Sidiropoulos, G.A. Papakostas, V.G. Kaburlasos, V.A. Nikopoulou, V. Holeva, A. Evangeliou, “**Distance Special Education Delivery by Social Robots**,” *Electronics*, vol. 9, no. 6, pp. 1034, 2020.
- C.42** G.A. Papakostas, J.W. Nolan, A.C. Mitropoulos, “**Nature-Inspired Optimization Algorithms for the 3D Reconstruction of Porous Media**”, *Algorithms*, vol. 13, no. 3, pp. 65, 2020.
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- E.6 G.A. Papakostas “**Advances in Pattern Analysis for Identity Recognition and Verification II**”, *Applied Sciences*, 2022.
- E.5 G.A. Papakostas “**Advances in Pattern Analysis for Identity Recognition and Verification**”, *Applied Sciences*, 2020.
- E.4 G.A. Papakostas “**Advances in Medical Image Segmentation 2019**”, *Symmetry*, 2019.
- E.3 G.A. Papakostas, “**Trends in Machine Learning for Visual Computing**”, *Journal of Imaging*, 2019.
- E.2 G.A. Papakostas, “**Advances in Medical Image Segmentation**”, *Symmetry*, 2018.
- E.1 G.A. Papakostas, K.I. Diamantaras, F.A.N. Palmieri “**Emerging Trends in Machine Learning for Signal Processing**”, *Computational Intelligence and Neuroscience*, 2017.

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)

Associate Editor

Electronics (Section: Artificial Intelligence) / MDPI
Mathematical Problems in Engineering / Hindawi
International Journal of Humanitarian Technology / Inderscience

Reviewer

IEEE
IEEE Trans. on Image Processing IEEE Trans. on Neural Networks and Learning Systems IEEE Trans. on Fuzzy Systems IEEE Trans. on Cybernetics IEEE Signal Processing Letters IEEE Transactions on Circuits and Systems for Video Technology
Elsevier
Pattern Recognition Information Sciences Image and Vision Computing Pattern Recognition Letters Neurocomputing Applied Mathematical Modelling Journal of Visual Communication and Image Representation Applied Soft Computing Optics & Lasers in Engineering Expert Systems With Applications Digital Signal Processing Information Processing Letters
Springer
Machine Vision and Applications Circuits Systems and Signal Processing Journal of Real-Time Image Processing Complex & Intelligent Systems Journal of Signal Processing Systems
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International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems / World Scientific Journal of Electronic Imaging / SPIE IET Image Processing / IET IET Computer Vision / IET Algorithms / MDPI Symmetry / MDPI Information / MDPI Mobile Information Systems / Hindawi Mathematical Problems in Engineering / Hindawi Computational Intelligence and Neuroscience / Hindawi Iranian Journal of Fuzzy Systems / Hindawi

Conference Referee

International Workshop on Systems, Signals and Image Processing (IWSSIP) - 2011
World Congress on Nature and Biologically Inspired Computing (NaBIC) - 2011-16
International Joint Conference on Neural Networks (IJCNN) - 2011-2016
World Congress on Information and Communication Technologies (WICT) - 2012-16
IEEE International Conference on Imaging Systems and Techniques (IST) - 2010
International Conference on Hybrid Artificial Intelligence Systems (HAIS) - 2010-16
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** 2951, **h-index** 31, **i10-index** 67,

Link: <http://scholar.google.com/citations?user=O9d4j7oAAAJ&hl=el&oi=ao>

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