# STAVROS A. KARKANIS

# CURRICULUM VITAE

# DECEMBER 2012

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# A. Personal Data.

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| **Name:** | **Stavros** |
| **Surname :** | **Karkanis** |
| **Date of Birth:** | 01/01/1964 |
| **Place of Birth:** | Athens, Greece. |

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| **Home Adress:** | Sifnou & Aeginis str., Lamia, 35100, Greece. |
| **Tel:** | 0030-22310-60165 (office), 6936040725 (mobile), 0030-22310-20478 (home). |
| **Work Address :** | TEI of Lamia, 3rd klm Old National Road to Athens, GR-35100 Lamia. |
| **Academic Position :** | **Professor, Dept. of Informatics & Computer Technology, TEI of Lamia, Greece.** |
| **Email:** | sk@teilam.gr, karkanis@gmail.com |
| **Web :** | **www.karkanis.gr** |

# B. Education.

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| **January** | **1996** | **PhD in Informatics**, Dept. of Informatics and telecommunications, University of Athens. |
| **April** | **1986** | **B.Sc. in Mathematics,** Dept. of Mathematics, University of Athens Greece. |

# C. Memberships.

- **IEEE**, Institute of Electrical and Electronics Engineers.
- **IAPR,** International Association for Pattern Recognition.
- **GAIPDM**, Greek Association for Image Processing and Digital Media.
- **HMS,** Hellenic Mathematical Society.
- **EUROMICRO Association.**

## D. Professional Experience.

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| **Sept. 2008 - Today** | President of Technological Educationa Institute (TEI) of Lamia - Greece. |
| **Sept. 2005 - Aug. 2008** | Vice-President of Technological Educationa Institute (TEI) of Lamia – Greece, with responsibilities for the internal educational & academic system. |
| **Sept. 2003 - Aug. 2005** | Faculty Director of the Technological Applications Faculty of TEI of Lamia. |
| **July 2002 - Aug. 2003** | Head of the Department of Informatics and Computer Technology.. |
| **Feb. 2002 - Today** | Professor, Dept. of Informatics & Computer Technology, TEI of Lamia, Greece. |
| **Mar. 1995 - Feb. 2002** | Senior Researcher with the Lab. of RTS-Image (Real Time Imaging Systems) Dept. of Informatics and Telecommunications, University of Athens. |
| **Nov. 1996 - May 1998** | Senior IT Consultant with the company INTRASOFT S.A., Dept. of International Marketing. |
| **Jan. 1995 - Nov. 1997** | As Specialist for the development of GIS Applications for emergency planning and risk management with the NRC "Democritus". |
| **Oct. 1991 - Dec. 1994** | Responsible for the development of integrated solutions – products of the company ORASIS Ltd. |
| **Mar. 1989 - Oct. 1991** | **Group Leader of the group of Parallel Image and Signal Processing of the company HITEC S.A.** |
| **Mar. 1987 - Mar. 1989** | Software Engineer of the R&D Dept of the company HITEC S.A. |

## E. Research Experience.

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| **Nov. 2012 - Today** | Member of the research group of the Project «Fault Diagnosis and Accommodation of Wheeled Mobile Robots», funded by National Research Funds "Arcimedes-03". |
| **Ιου. 2012 - Today** | Member of the research group of the Project « Design, Implementation and Evaluation of Blended learning Scenarios in a Teacher Training context accomodating their individual Psychological Characteristics», funded by National Research Funds "Arcimedes-03". |
| **Jan. 2008 - Apr. 2010** | Scientific Coordinator of the Project DebugIT (Detecting and Eliminating Bacteria Using Information Technology, Large-scale integrating project (FP7, 2008 - 2011), funded from the FP7 of the European Commission with a budget of 12.000.000€ www.debugit.eu . The budget for TEI of Lamia is 300K€ and the project ends by the end of 2012. |
| **Nov. 2004 - Aug. 2007** | Vice Director of Research Center of Central Greece, Head of the Informatics Department of the Research Center of Central Greece. |
| **May 2003 - Aug. 2004** | Member of the Research Committee of TEI as representative of the Dept. of Informatics of TEI. |
| **Sept. 2005 - Aug. 2007** | Member of the research group of the Project "Development of Algorithms and Strategies for optimized performance of large Distributed Systems", funded by National Research Funds "Arcimedes-02". |
| **Sept. 2005 - Aug. 2008** | Member of the research group of the Project "Computer Assisted Processing and Analysis of Image Sequences for recognition of Thyroid Nodules" in the context of National Research Funds "PENED". |
| **May 2004 - Aug. 2007** | Member of the research group of the Project "Development of a Medical Decision Support System for the diagnosis of cancer using genomic data", in the context of National Research Funds "Pythagoras". |
| **Apr. 2003 - Aug. 2008** | Project and Scientific Coordinator of the Project "Supporting Studies in Informatics", in which TEI of Lamia developed an innovative platform for distance learning courses. The |

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| | success of the project was rather high and brought major activities within TEI of Lamia. The funding budget exceeded an amount of 860k€. |
| **Jan. 1998 - Dec. 2000** | Member of the Scientific group of the project MEDEA «Microscanning Endoscope with Diagnostic and Enhanced resolution Attributes», with partners as LMZ, FhG/ISiT, EPFL, Univ. of Tuebingen etc. and a total budget 3 k€ in the context of BIOMED-2. |
| **Dec. 1996 - Dec. 1997** | Member of the Scientific group of the Project LUPACS: Land Use Planning and Chemical Sites" PL.950228 in the context of Programme Environment And Climate 1994-1998, as responsible of a GIS tool for the support of the decisions of land uses, in cooperation with the NCSR "Democritos". |
| **Apr. 1995 - Jun. 1997** | Member of the Scientific group MAT1-CT94-0022 Measurement and Testing (BCR) entitled "Multichannel Raman Gas Sensor for Quantitative Air Pollution Monitoring", as responsible of the communication part of the sensor, in cooperation with the Dept. of Informatics of University of Athens. |
| **Dec. 1995 - Dec. 1997** | Member of the Scientific group of the project "Assessment of the environmental risks" funded National Research Funds, in cooperation with the NCSR "Democritos". |
| **Nov. 1995 - Dec. 1996** | As Specialist for the development of GIS Applications for emergency planning and risk management. The system used for the development was the platform of AVENUE of the Arc Info GIS software. |
| **Jan. 1994 - Dec. 1994** | As a group supervisor for the installation and the maintenance of a Novell based network of PC's and a μ-VAX system running special Image Processing Software for satellite imagery for military purposes, during my military duties in Hellenic Air Force. |
| **Oct. 1993 to Jun. 1994** | As project manager responsible for the development and the integration of ORA-PLATES 1.0, an automatic system for the recognition of vehicles' plates using image processing techniques, with ORASIS Ltd., from |
| **Apr. 1992 - Nov. 1993** | Project manager responsible for the development and the integration of ORA-QC 1.0, an automatic system for the on line quality inspection of industrial products (textiles, wood, composites) using machine vision techniques on multi-transputer architectures, with ORASIS Ltd. |
| **Apr 1992** | Member of the Scientific group of the project project entitled "High Performance Computing for Industrial Applications - (HAMLET)" (partners AEG, TNO, Cap-Gemini, DAIMLER BENZ, PARSYTEC, IMNOS, TELEFUNKEN et.al) with a total budget of 10MECUs. |
| **Dec. 1991** | Project Leader of the BRITE/EURAM Project BE-4602, entitled "Vision based Internal and External Defect Inspection System for Metal Products" (partners: THOMSON/CSF, AUTOMA, BALTEAU, SLUMBERGER-BELBGIUM, ALURES, VTT-Finland) with a budget of 5MECUs. |
| **Nov. 1989 - Oct. 1991** | As Project Leader in the context of EUREKA project "In Process Vision based Quality Control and Management System for Textile Industries". |
| **Sept. 1989 - Dec. 1991** | As Project Leader in the context of BRITE project " Computer Vision based In-Process Quality Control". |
| **Feb. 1987 - Oct. 1987** | As Engineer in HITEC S.A., "On the application of Image Processing algorithms on Parallel Architectures, in the context of P-26 ESPRIT project. |

## F. Invited Participation in Committees.

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| **Jan. 1990 - Today** | **Invited Reviewer :**<br>• IEEE Transactions on Neural Networks.<br>• IEEE Transactions on Image Processing.<br>• Iranian Journal of Electrical and Computer Engineering (IJECE).<br>• Euromicro Conferences of EUROMICRO ASSOCIATION. |

- HEALTHINF Conferences.
- Institut National du Cancer, Cancer Biology department, France.
- FWF Austrian Science Fund, Austria.
- Reviewer in International Conference on Intelligent Systems and Signal Processing (IEEE-ISSP 2013).
- Reviewer in International Conference on Pattern Recognition (IEEE-ICPR).
- Invited Evaluator from the European Commission for research proposals in the context of BRITE / EURAM, 1992.
- Invited of the Steering Committee for the programme IMT (Industrial and Material Technology, of the DG XII of the Commission, 1994.

# G. Publications.

## G.1. Dissertation.

**S.A. Karkanis, Phd Dissertation,** *"Textural Recognition of Digital Images Supported by Parallel Architectures"*, 1995, Dept. of Informatics and Telecommunications, University of Athens.

## G.2 Journal Publications.

1. D.E. Maroulis, M. Savelonas, D.K. Iakovidis, S.A. Karkanis, N. Dimitropoulos, "Variable Background Active Contour Model for Computer-Aided Delineation of Nodules in Thyroid Ultrasound Images," *IEEE Transactions on Information Technology in Biomedicine*, vol. 11, no. 5, pp. 537-543, 2007

2. D.K. Iakovidis, M.A. Savelonas, S.A. Karkanis, D.E. Maroulis, "A Genetically Optimized Level Set Approach to Segmentation of Thyroid Ulrtrasound Images," *Applied Intelligence*, vol. 27, no. 3, pp.193-203, 2007.

3. D.E. Maroulis, I.N. Flaounas, D.K. Iakovidis, and S.A. Karkanis, "Microarray-MD: A System for Exploratory Analysis of Microarray Gene Expression Data," *Computer Methods and Programs in Biomedicine*, vol. 83, pp. 157-167, 2006.

4. D.K. Iakovidis, D.E. Maroulis, and S.A. Karkanis, "An Intelligent System for Automatic Detection of Gastrointestinal Adenomas in Video Endoscopy," *Computers in Biology and Medicine*, vol. 36, no. 10, pp. 1084-1103, 2006.

5. H. Albrecht, P. G. Papageorgas, D. Maroulis, N. Theofanous, S.A. Karkanis, B. Wagner, M. Schurr, C. Depeursinge and A. Menciassi, "Structure and characterization of an enhanced laserscanning endoscope based on microelectromechanical mirrors", *Journal of Electronic Imaging*, vol. 15, no 2, SPIE May 2006.

6. P.Papageorgas, **S.A. Karkanis**, N. Theofanous, A. Albrecht, "Multichannel Raman Gas Analyzer: The Data Acquisition and Control System. Measurement Improvement with Blue Laser Light", *IEEE Transactions on Instrumentation and Measurement*, vol. 53, No.1, pp.58-66, 2004.

7. D.K. Iakovidis, D.E. Maroulis, **S.A. Karkanis**, P. Papageorgas, and M. Tzivras, "Texture Multichannel Measurements for Cancer Precursors' Identification using Support Vector Machines," *Measurement*, vol. 36, pp. 297-313, 2004.

8. D.E. Maroulis, D.K. Iakovidis, **S.A. Karkanis**, and D.A. Karras, "CoLD: A Versatile System for Detection of Colorectal Lesions in Endoscopic Images," *Computer Methods and Programs in Biomedicine*, Elsevier Science, vol. 70, pp. 151-166, 2003.

9. **S.A. Karkanis**, D.K. Iakovidis, D.E. Maroulis, D.A. Karras, and M. Tzivras, "Computer Aided Tumor Detection in Endoscopic Video using Color Wavelet Features," *IEEE Transactions on Information Technology in Biomedicine*, vol. 7, pp. 141-152, 2003.

10. G.D. Magoulas, **S.A. Karkanis**, D.A. Karras and M.N.Vrahatis, "Comparison Study of Textural Descriptors for Training Neural Network Classifiers", *International Journal of Computer Research*, vol. 12, no. 4, 2003.

11. **S.A. Karkanis**, G.D. Magoulas and N. Theofanous, "Image Recognition and Neuronal Networks: Intelligent Systems for the Improvement of Imaging Information", *Minimal Invasive and Allied Technologies*, vol. 9, No. 3, 2000.

12. D.Karras, **S.A. Karkanis** and V. Mertzios, "Supervised and Unsupervised Neural Network Methods applied to Textile Quality Control based on Improved Wavelet Feature Extraction Techniques", *International Journal on Computer Mathematics*, vol. 67, pp. 169-181, 1998.

13. **S.A. Karkanis** and D.A. Karras, "A Novel Methodology for 1-D Signal Prediction using Wavelet Transformation and Neural Network Techniques", *Journal Neural, Parallel & Scientific Computations*, vol. 6, no. 3, pp. 417 – 428, 1998.

14. D.Karras, **S.A Karkanis** and B. Mertzios,"Information Systems based on Neural Network and Wavelet Methods with Application to Decision Making, Modelling and Prediction Tasks", *Kybernetes*, vol. 27 (3), pp 224-236, 1998.

15. **S.A. Karkanis**, C.Metaxaki-Kossionides, "PARTER: A Parallel System for Texture recognition", *Microprocessors and Microsystems*, Vol. 17, no.2, pp. 93-99, 1993.

16. J. Vergados, K.Tsoutsou, M.Loupis, **S.A. Karkanis** and B.Dimitriadis, "On-Line System Delivers Quality for Composite Materials", *Invited paper in Photonics Spectra*, vol. 38, No.4, pp. 169 - 172, 1992.

17. G.D. Tziallas, **S.A. Karkanis** and K. Tsoutsou, "A Knowledge based Approach for the Development of Concurrent Software", *Microprocessing and Microprogramming*, vol. 31, pp. 25-30, 1991.

18. **S.A. Karkanis**, C.Metaxaki-Kossionides and B. Dmitriadis, "A Machine-Vision Quality Inspection System for Textile Industries Supported by Parallel Multitransputer Architecture", *Microprocessing and Microprogramming*, vol. 28, pp. 247-252, 1989.

## G.3 *Book Chapters.*

19. M.A. Savelonas, D.K. Iakovidis, D.E. Maroulis, S.A. Karkanis, "An Active Contour Model Guided by LBP Distributions," in Lecture Notes in Computer Science, Advanced Concepts on Intelligent Vision Systems, vol. 4179, pp. 197-207, eds. J. Blanc-Talon, W. Philips, D. Popescu, Berlin, Heidelberg, Springer, 2006.

## G.4 *Conference Publications.*

20. E.I. Papageorgiou, C. Papadimitriou, **S.A.Karkanis**, "Management uncomplicated urinary tract infections using fuzzy cognitive maps", Proc. of the *9th International Conference on Information Technology and Applications in Biomedicine, ITAB 2009*, pp. November 5-7, 2009, Larnaca, Cyprus. (Special session of 1st International Workshop on Information Technology for Patient Safety (ITPS 2009)), ISBN: 978-1-4244-5379-5

21. D.K. Iakovidis, M.A. Savelonas, **S.A. Karkanis**, D.E. Maroulis, "Segmentation of Medical Images with Regional Inhomogeneities," in Proc. *International Conference on Pattern Recognition (ICPR), IAPR, Hong Kong, 2006*, (rated within the first 15% of the accepted papers), vol. 2, pp. 279-282.

22. M. Savelonas, D. Maroulis, D. Iakovidis, **S. Karkanis**, and N. Dimitropoulos, "A Variable Background Active Contour Model for Automatic Detection of Thyroid Nodules in Ultrasound Images," in Proc. *IEEE International Conference on Image Processing (ICIP), Genova, Italy, 2005*, pp. I-17-20.

23. M. Savelonas, D. Maroulis, D. Iakovidis, **S. Karkanis**, and N. Dimitropoulos, "A Variable Background Active Contour Model for Automatic Detection of Thyroid Nodules in Ultrasound Images," in *Proc. IEEE International Conference on Image Processing (ICIP)*, Genova, Italy, 2005.

24. D.K. Iakovidis, D.E. Maroulis, **S.A. Karkanis**, "A Comparative Study of Color-Texture Image Features," in *Proc. IEEE International Workshop on Signal and Image Processing (IWSSIP)*, Halkida, Greece, 2005.

25. D.K. Iakovidis, D.E. Maroulis, **S.A. Karkanis**, and A.G. Brokos, "A Comparative Study of Texture Features for the Discrimination of Gastric Polyps in Endoscopic Video," in *Proc. IEEE International Symposium on Computer-Based Medical Systems (CBMS)*, Dublin, Ireland, 2005, pp. 575-580.

26. D.E. Maroulis, M. Savelonas, **S.A. Karkanis**, D.K. Iakovidis, and N. Dimitropoulos, "Computer-Aided Thyroid Nodule Detection in Ultrasound Images," in *Proc. IEEE International Symposium on Computer-Based Medical Systems (CBMS)*, Dublin, Ireland, 2005, pp. 271-276.

27. D.K. Iakovidis, **S.A. Karkanis**, and D.E. Maroulis, "Color Wavelet Features for Texture Recognition under Varying Illumination using Support Vector Machines," in *Proc. IEEE International Conference on Image Processing (ICIP)*, Singapore, 2004, pp. 1505-1508.

28. D.K. Iakovidis, I.N. Flaounas, **S.A. Karkanis**, and D.E. Maroulis, "A Cascading Support Vector Machines System for

Gene Expression Data Classification," in *Proc. IEEE International Conference on Intelligent Systems*, Varna, Bulgaria, 2004, pp. 344-347.

29. D. Bariamis, D.K. Iakovidis, D.E. Maroulis, and **S.A. Karkanis**, "An FPGA-based Architecture for Real Time Image Feature Extraction," in *Proc. International Conference on Pattern Recognition (ICPR)*, IAPR, Cambridge, UK, 2004, pp. 801-804.

30. I.N. Flaounas, D.K. Iakovidis, D.E. Maroulis, and **S.A. Karkanis**, "Intelligent Analysis of Genomic Measurements", in *Proc. 13th IMEKO International Symposium on Measurements for Research and Industry Applications*, Athens, Greece, 2004, pp. 463-467.

31. D.K. Iakovidis, D.E. Maroulis, **S.A. Karkanis**, and I.N. Flaounas, "Color Texture Recognition in Video Sequences using Wavelet Covariance Features and Support Vector Machines," in *Proc. IEEE 29th EUROMICRO Conference*, Antalya, Turkey, Sept. 2003, pp. 199-204.

32. D.A. Karras, **S.A. Karkanis**, D.K. Iakovidis, D.E. Maroulis, and B.G. Mertzios., "Support Vector Machines for Improved Defect Detection in Manufacturing using Novel Multidimensional Wavelet Feature Extraction Involving Vector Quantization and PCA Techniques," in *Proc. NATO ASI NIMIA*, Crema, Italy, 2001, pp. 139-143.

33. **S.A. Karkanis**, D.K. Iakovidis, D.A. Karras, and D.E. Maroulis, "Detection of Lesions in Endoscopic Video using Textural Descriptors on Wavelet Domain Supported by Artificial Neural Network Architectures," in *Proc. IEEE International Conference on Image Processing (ICIP)*, Thessaloniki, Greece, 2001, pp. 833-836.

34. **S.A. Karkanis**, G.D. Magoulas, D.K. Iakovidis, D.A. Karras, and D.E. Maroulis, "Evaluation of Textural Feature Extraction Schemes for Neural Network-Based Interpretation of Regions in Medical Images," in *Proc. IEEE International Conference on Image Processing (ICIP)*, Thessaloniki, Greece, 2001, pp. 281-284.

35. **S.A. Karkanis**, D.K. Iakovidis, D.E. Maroulis, G.D. Magoulas, and N. Theofanous, "Tumor Recognition in Endoscopic Video Images," in *Proc. IEEE 26th EUROMICRO Conference*, Medical Informatics, Maastricht, Netherlands, 2000, pp. 423-429.

36. **S.A. Karkanis**, G.D. Magoulas, D.K. Iakovidis, D.E. Maroulis, and M.O. Schurr, "On the Importance of Feature Descriptors for the Characterisation of Texture, in Proc. 4th World Multiconference on Systems," *Cybernetics and Informatics (SCI)*, Orlando, Florida, 2000, vol. 2, pp. 96-101.

37. **S.A.Karkanis**, G.D. Magoulas, M. Gregoriadou and M. Schurr, "Detecting Abnormalities in Colonoscopic Images by Textural Description and Neural Networks", *Advanced Course on Artificial Intelligence 1999 (ACAI99)*, Workshop on Machine Learning in Medical Applications 5-16 July 1999, Chania, Greece, pp. 61-66.

38. **S.A.Karkanis**, K. Galousi and D. Maroulis, "Classification of Endoscopic Images Based on Texture Spectrum", *Advanced Course on Artificial Intelligence 1999 (ACAI99), Workshop on Machine Learning in Medical Applications* 5-16 July 1999, Chania, Greece pp. 61-66.

39. P. Papageorgas , D. Maroulis, **S.A.Karkanis**, N. Theofanous, "A Specific Multi-channel Photon-Counting Unit for Air-Pollution Measurement", *ICECS'99 IEEE International Conference on Electronics Circuits & Systems*, Sept. 1999.

40. **S.A.Karkanis**, G.D.Magoulas and D.A.Karras, "Neural Network based Textural Labeling of Images in Multimedia Applications", *25th EUROMICRO*, Conference, Milan, Italy, 8-10 Sept. 1999, pp 392-396.

41. D.A. Karras, **S.A. Karkanis**, B.G. Mertzios, "Image Compression using the wavelet transform on textural regions of interest", *24th EUROMICRO Conference*, 21-28 Aug. 1998 in Sweden, pp.633-639.

42. **S.A Karkanis**, D. Karras, and B. Mertzios, "1-D Signal Prediction Using Wavelets", *5th IWISSP* (IEEE & IEE Conference) 3-5 Jun. 1998 Zagreb, Croatia.

43. **S.A. Karkanis** and G.S. Bonanos, "A GIS based Desicion Support Tool for the Management of Industrial Risk", *SRA '97 Annual Conference (Society for Risk Analysis)*, 15-18 June 1997, Stockholm, Sweden, pp. 652-658.

44. **S.A. Karkanis** and D.A. Karras, "A Classification Approach to Image Segmentation Structure based on Wavelet Transform", *23rd EUROMICRO*, Budapest 1-4 Sept 1997, pp.56 - 60.

45. D.Karras, **S.A Karkanis** and B. Mertzios, "Texture Discrimination for Quality Control using Wavelet and Neural Network Techniques", *3rd IWISP* , 4-7 Nov. 1996, Manchester, pp.191-194

46. **S.A. Karkanis**, "Texture Discrimination using Wavelet Decomposition and Statistcal Modeling", *SPIE '96*, Orlando, Florida, 8-12 April 1996, vol. 2762, pp.336-342

47. **S.A. Karkanis**, K.Tsoutsou, J. Vergados and B. Dimitriadis "A real-time Quality Inspection System for Textile

Industries", *SPIE "On innovative optics and phase conjugate optics",*13-15 March 1991, The Hague, vol. 1500, pp.164-170.

48. **S.A. Karkanis**, C.Metaxaki-Kossionides K.Tsoutsou and B. Dimitriadis, "An On-line Quality Inspection System for Textile Industries", *IEEE MELECON '91*, 22-24 May 1991, pp. 1255 – 1259.

49. M. Loupis, **S.A. Karkanis**, J. Vergados and K.Tsoutsou, "An On-line Quality Inspection System for Composite Materials Manufacturing", *EURISCON '91*, pp. 23-28, 1991, Corfu.

50. C.Dimopoulos, N.Milliaraki, **S.A.Karkanis**, et.al, "A machine-vision based PCB inspection system supported by parallel multitransputer architecture" *5th CIM-Europe Conference*, 17-19 May 1989, Athens, pp.321-332

51. M.A. Savelonas, D.E. Maroulis, D.K. Iakovidis, **S.A. Karkanis**, "A Novel Deformable Model for Medical US Image Segmentation," in *Proc. Panhellenic Conference on Informatics (PCI)*, Volos, Greece, 2005.

52. D.K. Iakovidis, D.E. Maroulis, **S.A. Karkanis**, and M. Tzivras, "Support Vector Machines for Tumor Detection in Color Endoscopy," *NATO-ASI LTP 2002*, Poster Presentation, Leuven, Belgium, July 2002.

53. D.A. Karras, **S.A. Karkanis**, D.K. Iakovidis, D.E. Maroulis, and B.G. Mertzios, "Improved Defect Detection in Manufacturing using Novel Multidimensional Wavelet Feature Extraction Involving Vector Quantization and PCA Techniques," in *Proc. 8th Panhellenic Conference on Informatics*, vol. 2, Nov. 7-10, Nicosia, Cyprus, 2001, pp. 165-173.