CURRICULUM VITAE
VASSILIS P. PLAGIANAKOS
(November 2018)

Personal Data		
	Name:	Vassilis Plagianakos
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	www address:	http://www.plagianakos.gr/
	Date of Birth:	May 6th, 1973 (06/05/1973)

Education

- 1996-2003   Ph.D. in Mathematics, Department of Mathematics, University of Patras, Greece.
- 1992-1996   B.Sc. in Mathematics, Department of Mathematics, University of Patras, Greece.

Professional activities

- 11/2018 - present   Professor and Head of the Department of Computer Science and Biomedical Informatics, University of Thessaly, Greece.
- 9/2014 – 11/2018   Associate Professor and Head of the Department of Computer Science and Biomedical Informatics, University of Thessaly, Greece.
- 6/2008 – 9/2014   Assistant Professor at the Department of Computer Science and Biomedical Informatics, University of Thessaly, Greece.
- 9/2005 - present   Tutor at the Hellenic Open University, Course in Computer Science, School of Science and Technology.
- 9/2005 – 6/2008   Visiting Assistant Professor at the Department of Computer Science and Biomedical Informatics, University of Central Greece, Greece.
- 3/2004 – 9/2004   Visiting Lecturer at the Department of Materials Science, University of Patras, Greece.
- 9/2003 – 2/2004   Visiting Lecturer at the Department of Information and Communication Systems Engineering, University of the Aegean, Greece.
- 6/1998 – 9/2003   Multilab S.A. Network and systems engineer.
- 1/1997 – 12/2000   Administrator of the Web Server of the Department of Mathematics, University of Patras.

	• 1/1997 – 6/1998	Network and systems administrator at the Computer Laboratory of the Department of Mathematics, University of Patras.

Administrative Positions

	• 09/2014 – today	Head of the Department of Computer Science and Biomedical Informatics, University of Thessaly, Greece.
	• 09/2016 – today	Member of the Senate of the University of Thessaly.
	• 02/2015 – today	Director of the Postgraduate Programme: M.Sc. in Informatics and Computational Biomedicine, Department of Computer Science and Biomedical Informatics, University of Thessaly, Greece.
	• 03/2014 – today	Director of the Intelligent Systems Laboratory, Department of Computer Science and Biomedical Informatics, University of Thessaly, Greece.
	• 01/2017-12/2018	Head of the Board of the Hellenic Artificial Intelligence Society

Research Interests

- Theory of Neural Networks and Learning.
- Evolutionary and Genetic Algorithms.
- Machine Learning Applications in Pattern Recognition, Biomedical Informatics and Bioinformatics.
- Data Mining and Big Data Analysis.
- Intelligent Decision Making.
- Parallel and Distributed Computations.
- Intelligent Optimization.

Foreign Languages

- Cambridge Proficiency in English.

Teaching Experience	• 2016-2017	1. Numerical Analysis 2. Applied Mathematics
	• 2016-2017	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Data Mining
	• 2015-2016	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Data Mining
	• 2014-2015	5. Artificial Intelligence 6. Pattern Recognition 7. Numerical Analysis 8. Data Mining
	• 2013-2014	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Discrete Mathematics
	• 2012-2013	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Discrete Mathematics
	• 2011-2012	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Discrete Mathematics
	• 2010-2011	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Discrete Mathematics
	• 2009-2010	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Operations Research
	• 2008-2009	1. Artificial Intelligence 2. Pattern Recognition 3. Numerical Analysis 4. Operations Research
	• 2007-2008	1. Artificial Intelligence 2. Object-oriented Programming 3. Numerical Analysis 4. Operations Research
	• 2006-2007	1. Numerical Analysis 2. Discrete Mathematics
	• 2005-2006	1. Numerical Analysis 2. Discrete Mathematics 3. Introduction to Computer Science
	• 2004-2005	1. Computational Intelligence 2. Computational Intelligence Laboratory (courses of the Postgraduate program in Mathematics of Computers and Decision Making)
	• 2003-2004	1. Computational Intelligence Laboratory (course of the Postgraduate program in Mathematics of Computers and Decision Making)

- 2003-2004
  1. Computer Science II
  2. Probability and Statistics
- 2003-2004
  1. Algorithms and data structures
  2. Programming Languages and Methodologies II
- 2000-2001
  1. Microcomputers
- 1999-2000
  1. Microcomputers.
- 1998-1999
  1. Introduction to Computer Science.
  2. Microcomputers
- 1997-1998
  1. Discrete Mathematics II.
  2. Microcomputers.
- 1996-1997
  1. Computer Applications.
  2. Microcomputers.

- 1998-2001 Instructor of the Greek Mathematical Society (professional seminar series).
- 1998-2000 Instructor of the FutureKids Inc.

Reviewer	- IEEE Transactions on Neural Networks - IEEE Transactions on Evolutionary Computation - IEEE Transactions on Fuzzy Systems - IEEE Transactions on Pattern Analysis and Machine Intelligence - IEEE Transactions on Medical Imaging - IEEE Transactions on Human-Machine Systems - IEEE Transactions on Systems, Man, and Cybernetics, Part B - IEEE Transactions on Systems, Man, and Cybernetics, Part C - IEEE Journal of Biomedical and Health Informatics - Neurocomputing - Information Sciences - Signal Processing - Neural Processing Letters - Expert Systems - Artificial Intelligence in Medicine - Expert Systems with Applications - Swarm Intelligence - Swarm and Evolutionary Computation - Soft Computing - Evolving Systems - Applied Soft Computing - Pattern Analysis and Applications - Journal of Computational Science - Computers in Biology and Medicine - Artificial Intelligence Review - Computer Methods and Programs in Biomedicine - Neural Computing & Applications - Sensors - Journal of Optimization - Journal of Information Technology in Biomedicine - Heliyon - OMICS: A Journal of Integrative Biology - BioMed Research International - Statistics and Computing - Journal Computational Optimization and Applications - Applied Numerical Mathematics - Applied Mathematics and Computation - Computational Intelligence and Neuroscience - Mathematical Problems in Engineering - Quality Technology & Quantitative Management - Communications in Statistics – Theory and Methods - International Journal of Computer Mathematics - International Journal of Artificial Intelligence Tools - International Journal of Swarm Intelligence - Soft Computing and Automation Journal

Reviewer (continued)

- Applied Mathematics
- Sustainability
- Journal of Computational Engineering
- Computational Optimization and Applications
- Journal of Developmental Biology and Tissue Engineering
- Journal of Artificial Societies and Social Simulation
- Computing and Informatics
- ISRN Applied Mathematics
- International Journal of Bio-Inspired Computation
- Mathematical and Computational Applications
- Journal of Electrical and Computer Engineering
- Annals of Mathematics, Computing and Teleinformatics
- British Journal of Mathematics & Computer Science
- Journal of King Saud University - Computer and Information Sciences
- Journal of Zhejiang University
- Reviewer of the book "Computational Intelligence in Bioinformatics", Springer Verlag, 2008.

Conference and Special Session Organization	**Special Session**: "Recent Approaches to Computational Intelligence: Theory and Applications", Fourth World Congress of Nonlinear Analysts (WCNA-2004), Orlando, USA, 2004. **Special Session**: "Computational Approaches to Artificial Intelligence: Theory, Methods and Applications", International Conference of Computational Methods in Sciences and Engineering (ICCMSE 2004), Greece, 2004. **Special Session**: "Computational Approaches to Artificial Intelligence: Theory, Methods and Applications", International Conference of Computational Methods in Sciences and Engineering (ICCMSE 2005), Greece, 2005. **Special Session**: "Computational Approaches to Artificial Intelligence: Theory, Methods and Applications", International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2005), Greece, 2005. - Member of the Program Committee of the 3rd Hellenic Conference on Artificial Intelligence (SETN 2004). - Member of the Program Committee of the 5th Hellenic Conference on Artificial Intelligence (SETN 2008). **Special Session**: "Data Clustering and Bioinformatics", Sixth International Meeting on Computational Intelligence Methods for Bioinformatics and Biostatistics (CIBB 2009), Genova, Italy, 2009. - Member of the Program Committee of the International Conference of Numerical Analysis and Applied Mathematics (ACNAAM 2009). - Member of the Program Committee of the 6th Hellenic Conference on Artificial Intelligence (SETN 2010). **Special Session**: "Data Clustering and Bioinformatics", Seventh International Meeting on Computational Intelligence Methods for Bioinformatics and Biostatistics (CIBB 2010), Palermo, Italy, 2010. - Member of the Program Committee of the 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010). - Member of the Program Committee of the 3rd International Conference on PErvasive Technologies Related to Assistive Environments (PETRA2010). - Member of the Program Committee of the XII Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON 2010). - Member of the scientific committee of the International Symposium on INnovations in Intelligent SysTems and Applications (INISTA 2011). - Member of the International Program Committee of Artificial Intelligence and Soft Computing (ASC 2011). - Member of the Program Committee for the 2011 International Joint Conference on Neural Networks (IJCNN 2011). - Member of the Program Committee of the 2012 IEEE International Conference of the Engineering in Medicine and Biology Society (EMBC 2012). - Member of the program committee of the 2011 International Conference on Data Mining (DMIN11). - Member of the Program Committee of the 12th EANN / 7th AIAI Joint Conferences, 2012. **Hybrid Special Session**: "Computational Intelligence in Bioinformatics", 2012 IEEE World Congress on Computational Intelligence (IEEE WCCI 2012), Brisbane, Australia, 2012. - Member of the Program Committee of the 2nd Workshop on Artificial Intelligence Applications in Biomedicine (AIAB 2012).

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Conference and Special Session Organization (continued)

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- Member of the Program Committee of the 2012 IEEE World Congress on Computational Intelligence (IEEE WCCI 2012).
- **General co-chair** of the 7th Hellenic Conference on Artificial Intelligence (SETN 2012).
- Member of the Program Committee of the 2012 IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2012).
- Member of the Program Committee of the 2012 IEEE International Conference of the Engineering in Medicine and Biology Society (EMBC 2012).
- Member of the International Program Committee of Artificial Intelligence and Soft Computing (ASC 2012).
- Member of the program committee of the 2012 International Conference on Data Mining (DMIN12).
- Member of the Program Committee for the 2013 International Joint Conference on Neural Networks (IJCNN 2013).
- Member of the Program Committee of the 13th Engineering Applications of Neural Networks (EANN 2013).
- Member of the Program Committee of the 2013 Genetic and Evolutionary Computation Conference (GECCO 2013).
- Member of the Program Committee of the 9th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI 2013).
- Member of the Program Committee of the 2013 IEEE Congress on Evolutionary Computation (IEEE CEC 2013).
- Member of the Program Committee of the 2013 IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2013).
- Member of the Program Committee of the IEEE Symposium Series on Computational Intelligence 2013 (SSCI 2013).
- **Special Session**: "Computational Intelligence in Bioinformatics", 2013 IEEE Congress on Evolutionary Computation (IEEE CEC 2013).
- Member of the Program Committee of the 2013 IEEE International Conference of the Engineering in Medicine and Biology Society (EMBC 2013).
- Member of the Program Committee of the 14th Engineering Applications of Neural Networks (EANN 2014).
- Member of the **Steering Committee** of the 8th Hellenic Conference on Artificial Intelligence (SETN 2014).
- **Hybrid Special Session**: "Computational Intelligence in Bioinformatics", 2014 IEEE World Congress on Computational Intelligence (IEEE WCCI 2014).
- Member of the Program Committee of the 2014 IEEE World Congress on Computational Intelligence (IEEE WCCI 2014).
- Member of the program committee of the 2014 International Conference on Data Mining (DMIN14).
- Member of the Program Committee of the 9th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI 2014).
- Member of the Program Committee of the 2015 IEEE Congress on Evolutionary Computation (IEEE CEC 2015).
- Member of the Program Committee of the 9th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI 2015).
- **Special Session**: "Computational Intelligence in Bioinformatics", 2015 IEEE Congress on Evolutionary Computation (IEEE CEC 2015).

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Conference and Special Session Organization (continued)	• Member of the Program Committee of the 9th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI 2016). • Member of the **Steering Committee** of the 9th Hellenic Conference on Artificial Intelligence (SETN 2016). • Member of the Program Committee of the 2016 IEEE World Congress on Computational Intelligence (IEEE WCCI 2016). • **Hybrid Special Session**: "Computational Intelligence in Bioinformatics", 2016 IEEE World Congress on Computational Intelligence (IEEE WCCI 2016). • **Special Session**: "Computational Intelligence in Bioinformatics", 2017 IEEE Congress on Evolutionary Computation (IEEE CEC 2017). • **General co-chair** of the 10th Hellenic Conference on Artificial Intelligence (SETN 2018). • **General co-chair** of the 31st Hellenic Conference on Statistics (ESI 2018).
Awards - Member	• European Network of Excellence on Intelligent Technologies for Smart Adaptive Systems (EUNITE), third paper award 2001 - Session on "Adaptive Systems and Hybrid Computational Intelligence in Medicine". • IEEE Neural Network Council 2000 Student Travel Grant. • IEEE Neural Network Council 2001 Student Travel Grant. • Support from Region 8 IEEE Voluntary Contribution Fund (2004). • Coordinator – Problem Coordinator of the 45th International Mathematical Olympiad 2004 (IMO 2004). • Member of the Institute of Electrical and Electronics Engineers (IEEE). • Member of the University of Patras Artificial Intelligence Research Center (UPAIRC). • President of the Central Greece cell of WROHellas (member of WRO-World Robot Olympiad). • Member of the Board of the Hellenic Artificial Intelligence Society (2011-2015). • Member of the IEEE Bioinformatics and Bioengineering Technical Committee (BBTC) (2010-present). • Chair of the Board of the Hellenic Artificial Intelligence Society (2017-2019).

Participation in Research Projects	• Principal Investigator of the University of Thessaly Research Team for the "Research-Create-Inovate" national project funded by EPAnEK 2014-2020: "Smart Infotainment System with Emotional Intelligence (SISEI)", 2018, (duration 36 months). • Principal Investigator of the University of Thessaly Research Team for the "Research-Create-Inovate" national project funded by EPAnEK 2014-2020: "Smart Delivery Routing System in Urban Environments", 2018, (duration 36 months). • Researcher in the Operational Program "Researcher Support with Emphasis on New Researches" of the National Strategic Reference Framework (NSRF): "Big graph mining for deciphering complex disease mechanisms", 2018, (duration 15 months). • Researcher in the research program: "Excellence II": "Integration of Data from Multiple Sources: a fusion of epidemiology and bioinformatics with applications to complex diseases", 2014, (duration 24 months). • Principal Investigator of the University of Thessaly Research Team for the "Cooperation 2011" national project: "Providing Integrated eHealth Services for Personalized Medicine utilizing Cloud Infrastructure (PinCloud)", (duration 22 months). • Researcher in the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) - Research Funding Program: Thalis: "Interdisciplinary Research in Affective Computing for Biological Activity Recognition in Assistive Environments", (duration 36 months). • Principal Investigator: "Herakleitos II Program", 2011-2013, (duration 36 months), "Data mining fast data streams of ultra high dimension". • Main Postdoctoral researcher in the research program: Pythagoras 2004, (duration 30 months), "Analysis and Development of Computational Intelligence Methods and Applications". • Main Postdoctoral researcher in the research program: K. Karatheodoris 2003, (duration 36 months), "Novel Neural Network training algorithms for automatic analysis and interpretation of endoscopy video sequences". • Main researcher in the research program: YPER 1997, (duration 36 months), "Analysis and design of effective optimization algorithms for the study of the corruption mechanisms of museum exhibits from atmospheric pollution". • Researcher in the research program: PLATON 1998, (duration 12 months), Greek-French cooperation, "Design of efficient symbolic & numerical methods for solving sparse nonlinear algebraic systems of equations and their applications in robotics, vision and biochemistry".

Interests and Special Knowledge in Computer Networks	• Design, implementation and support of secure multi-protocol networks, with high efficiency and guaranteed quality of service. • Design of security policies for computer networks, firewall administration and virtual private networks (VPNs). • Configuration and administration of network devices of CISCO Systems (Routers, Access Servers, Switches, Firewalls, VPN concentrators, Intrusion Detection Devices). • Research, design and implementation of TCP/IP networks for advanced network services, such as electronic commerce, distance learning, tele-medicine, teleconference and video broadcasting. • Integration of Data and Voice networks, using Frame Relay and ATM Cell Relay technologies.

Specialization and Certifications	Cisco Certified Network Associate (CCNA)
	Brainbench Certified Professional TCP/IP Administrator
	Brainbench Certified Professional Network Technician
	Brainbench Certified Professional Internet Security Specialist
	Brainbench Certified Professional Linux Administrator
	Cisco Wireless LAN for SE's and FE's
	Cisco Security BootCamp 2000.

Computer Systems Administration and Programming Languages	• Operating Systems	MS Windows Unix (SunOS, Solaris, IRIX, HP-UX, Digital Unix and Linux).
	• Programming Languages	C++, Turbo Pascal, Visual Basic, Fortran 77/90, Basic.
	• Web design and administration	HTML, DHTML, XML, ASP, PHP, JavaScript, Perl, CGI scripting, Java++, MS Frontpage, Macromedia Dreamweaver, Macromedia Flash.
	• Word Processing	MS Word, LaTeX, TeX.
	• Scientific software packages	MatLab, Mathematica, MathCad, Grapher, Origin.
	• Other software packages	Oracle (DBA and SQL), Delphi, C++ Builder, J Builder, MS Access, MS Excel, Corel Draw, Corel Photopaint.
	• Network administration	HP Openview, CiscoWorks, Cisco Secure Policy Manager (CSPM).

List of Publications

A. In Refereed Journals.

1. **M.N. Vrahatis, G.D. Magoulas, and V.P. Plagianakos**, *Globally Convergent Modification of the Quickprop Method*, Neural Processing Letters, Vol. 12, No.2, 159-170, (2000).

2. **V.P. Plagianakos, N.K. Nousis, and M.N. Vrahatis**, *Locating and Computing in Parallel all the Simple Roots of Special Functions Using PVM*, Journal of Computational and Applied Mathematics, Vol. 133, 545-554, (2001).

3. **G.D. Magoulas, V.P. Plagianakos, G.S. Androulakis and M.N. Vrahatis**, *A Framework for the Development of Globally Convergent Adaptive Learning Rate Algorithms*, International Journal of Computer Research, Vol. 10, No. 1, 1-10, (2001).

4. **G.D. Magoulas, V.P. Plagianakos, and M.N. Vrahatis**, *Adaptive stepsize algorithms for on-line training of neural networks*, Nonlinear Analysis, Theory, Methods and Applications, Vol. 47, 3425-3430, (2001).

5. **K.E. Parsopoulos, V.P. Plagianakos, G.D. Magoulas and M.N. Vrahatis**, *Objective function "stretching" to alleviate convergence to local minima*, Nonlinear Analysis, Theory, Methods and Applications, Vol. 47, 3419-3424, (2001).

6. **V.P. Plagianakos, G.D. Magoulas and M.N. Vrahatis**, *Learning in multilayer perceptrons using global optimization strategies*, Nonlinear Analysis, Theory, Methods and Applications, Vol. 47, 3431-3436, (2001).

7. **N.A. Katsanos, E. Iliopoulou, V.P. Plagianakos, and H. Mangou**, *Interrelations between Absorption Energiesand Local Isotherms, Local Monolayer Capabilities, and Energy Distribution Functions, as Determined for Heterogeneous Surfaces by Inverse Gas Chromatography,* Journal of Colloid and Interface Science, Vol. 239, 10-19, (2001).

8. **F. Roubani-Kalantzopoulou, T. Artemiadi, I. Bassiotis, N.A. Katsanos, and V.P. Plagianakos**, *Time separation of Absorption Sites on Heterogeneous Surfaces by Inverse Gas Chromatography,* Chromatographia, Vol. 53, 315-320, (2001).

9. **N.A. Katsanos, F. Roubani-Kalantzopoulou, E. Iliopoulou, I. Bassiotis, V. Siokos, M.N. Vrahatis, and V.P. Plagianakos,** *Lateral Molecular Interactions on Heterogeneous Surfaces Experimentally Measured*, Colloid Surfaces A, Vol. 201, 173-180, (2002).

10. **G.D. Magoulas, V.P. Plagianakos, and M.N. Vrahatis,** *Globally Convergent Algorithms with Local Learning Rates*, IEEE Transactions on Neural Networks, Vol. 13, 774-779, (2002).

11. **V.P. Plagianakos, G.D. Magoulas, and M.N. Vrahatis,** *Deterministic Nonmonotone Strategies for Effective Training of Multi-Layer Perceptrons,* IEEE Transactions on Neural Networks, Vol. 13, 1268-1284, (2002).

12. **V.P. Plagianakos and M.N. Vrahatis**, *Parallel Evolutionary Training Algorithms for `Hardware-Friendly' Neural Networks*, Natural Computing, Vol. 1, 307-322, (2002).

13. **M.N. Vrahatis, G.D. Magoulas, and V.P. Plagianakos**, *From linear to nonlinear iterative methods*, Applied Numerical Mathematics, Vol. 45, 59-77, (2003).

14. **G.D. Magoulas, V.P. Plagianakos, and M.N. Vrahatis,** *Neural network-based colonoscopic diagnosis using on-line learning and differential evolution*, Applied Soft Computing, Vol. 4, 369-379, (2004).

15. **N.G. Pavlidis, V.P. Plagianakos, D.K. Tasoulis, and M.N. Vrahatis**, *Financial Forecasting Through Unsupervised Clustering and Neural Networks*, Operations Research, Vol. 6, 103-127, (2006).

16. **N.G. Pavlidis and D.K. Tasoulis and V.P. Plagianakos and M.N. Vrahatis**, *Computational Intelligence Methods for Financial Time Series Modeling*, International Journal of Bifurcation and Chaos, Vol. 16, 2053-2062, (2006).

17. **V.P. Plagianakos, G.D. Magoulas, and M.N. Vrahatis**, *Evolutionary Training of Hardware Realizable Multilayer Perceptrons*, Neural Computing and Application, Vol. 15, 33-40, (2005).

18. **D.K. Tasoulis, V.P. Plagianakos, and M.N. Vrahatis**, *Unsupervised clustering in mRNA expression profiles*, Computers in Biology and Medicine, Vol. 36, 1126-1142, (2006).

19. **V.P. Plagianakos, G.D. Magoulas, and M.N. Vrahatis,** *Distributed Computing Methodology for Training Neural Networks in an Image-guided Diagnostic Application*, Computer Methods and Programs in Biomedicine, Vol. 81, 228–235, (2006).

20. **D.K. Tasoulis, P. Spyridonos, N.G. Pavlidis, V.P. Plagianakos, P. Ravazoula, G. Nikiforidis, M.N. Vrahatis**, *Cell-nuclear data reduction and prognostic model selection in bladder tumor recurrence*, Artificial Intelligence In Medicine, Vol. 38, 291-303, (2006).

21. **M.G. Epitropakis, V.P. Plagianakos, and M.N. Vrahatis**, *Hardware-Friendly Higher-Order Neural Network Training Using Distributed Evolutionary Algorithms*, Applied Soft Computing, Vol. 10, 398-408, (2010).

22. **S.K. Tasoulis, D.K. Tasoulis, and V.P. Plagianakos**, *Enhancing Principal Direction Divisive Clustering*, Pattern Recognition, Vol. 43, 3391-3411, (2010).

23. **M.G. Epitropakis, D.K. Tasoulis, N.G. Pavlidis, V.P. Plagianakos, and M.N. Vrahatis**, *Enhancing Differential Evolution Utilizing Proximity-based Mutation Operators*, IEEE Transactions on Evolutionary Computation, Vol. 15, 99-119, (2011).

24. **M.G. Epitropakis, V.P. Plagianakos, and M.N. Vrahatis,** *Evolving cognitive and social experience in Particle Swarm Optimization through Differential Evolution: A hybrid approach*, Information Sciences, Vol. 216, 50-92, (2012).

25. **S.K. Tasoulis, D.K. Tasoulis, and V.P. Plagianakos**, *Random Direction Divisive Clustering*, Pattern Recognition Letters, Vol. 34, 131-139, (2013).

26. **S.K. Tasoulis, C.N. Doukas, V.P. Plagianakos, and I. Maglogiannis**, *Statistical Data Mining of Streaming Motion Data for Activity and Fall Recognition in Assistive Environments*, Neurocomputing, Vol. 107, 87-96, (2013).

27. **S.K. Tasoulis, V.P. Plagianakos and I. Maglogiannis**, *Fractal analysis and fuzzy c-means clustering for quantification of fibrotic microscopy images*, Artificial Intelligence Review, Springer, 1-17, (2013).

28. **V.P. Plagianakos**, *Unsupervised Clustering and Multi-Optima Evolutionary Search*, Engineering Intelligent Systems, Vol. 22, (2014).

29. **K.K. Delibasis, I. Maglogiannis, and V.P. Plagianakos**, *Refinement of Human Silhouette Segmentation in Omni-Directional Indoor Videos analysis*, Computer Vision and Image Understanding, Vol. 128, 65-83, (2014).

30. **I. Maglogiannis, S.V. Georgakopoulos, S.K. Tasoulis, and V.P. Plagianakos**, *A Software Tool for the Automatic Detection and Quantification of Fibrotic Tissues in Microscopy Images*, Information Sciences, Vol. 308, 125-139, (2015).

31. **K.K. Delibasis, V.P. Plagianakos, and I. Maglogiannis**, *Estimation of Robot Position and Orientation Using a Stationary Fisheye Camera*, International Journal on Artificial Intelligence Tools, Vol. 24, 1560004, (2015).

32. **K.K. Delibasis, S.V. Georgakopoulos, K. Kottari, V.P. Plagianakos, and I. Maglogiannis**, *Geodesically-corrected Zernike descriptors for pose recognition in omni-directional images*, Integrated Computer-Aided Engineering, Vol. 23, 185-199, (2016).

33. **K. Kottari, K.K. Delibasis, and V.P. Plagianakos**, *Real Time Vision-based Measurements for Quality Control of Industrial Rods on a Moving Conveyor*, Multimedia Tools and Applications, 1-18, (2017).

34. **S.V. Georgakopoulos, K. Kottari, K. Delibasis, V.P. Plagianakos, and I. Maglogiannis**, *Pose Recognition Using Convolutional Neural Networks on Omni-directional Images*, Neurocomputing, Vol. 280, 23-31, (2018).

35. **Manolis Koubarakis, George Vouros, Georgios Chalkiadakis, Vassilis Plagianakos, Christos Tjortjis, Ergina Kavallieratou, Dimitris Vrakas, Nikolaos Mavridis, Georgios Petasis, Konstantinos Blekas, and Anastasia Krithara**, *AI in Greece: The Case of Research on Linked Geospatial Data*, AI Magazine, accepted for publication, (2018).

36. **S.V. Georgakopoulos, K. Kottari, K. Delibasis, V.P. Plagianakos, and I. Maglogiannis**, *Improving the performance of convolutional neural network for skin image classification using the response of image analysis filters*, Neural Computing and Applications, 1-18, (2018).

37. **D.K. Iakovidis, S.V. Georgakopoulos, M. Vasilakakis, A. Koulaouzidis and V.P. Plagianakos**, *Detecting and Locating Gastrointestinal Anomalies Using Deep Learning and Iterative Cluster Unification*, IEEE Transactions on Medical Imaging, Vol. 37, 2196-2210, (2018).

B. Edited Volume.

1. **Ilias Maglogiannis, Vassilis Plagianakos, and Ioannis Vlahavas (eds)**, *Artificial Intelligence: Theories and Applications*, Proceedings of the 7th Hellenic Conference on AI, Lecture Notes in Computer Science, LNCS/LNAI, Vol. 7297, SETN 2012, Lamia, Greece, (2012).

C. In Refereed Conference Proceedings.

1. **V.P. Plagianakos and M.N. Vrahatis**, *Training Neural Networks with 3-bit Integer Weights*, In: Proceedings of the Genetic and Evolutionary Computation Conference (GECCO'99), W. Banzhaf, J. Daida, A.E. Eiben, M.H. Garzon, V. Honavar, M. Jakiela, and R.E. Smith (eds.), Morgan Kaufmann, 910-915, Orlando, U.S.A., (1999).
2. **V.P. Plagianakos and M.N. Vrahatis**, *Neural Network Training with Constrained Integer Weights*, In: Proceedings of the Congress of Evolutionary Computation (CEC'99), P.J. Angeline, Z. Michalewicz, M. Schoenauer, X. Yao, and A. Zalzala (eds.), IEEE Press, 2007-2013, Washington D.C., U.S.A., (1999).
3. **V.P. Plagianakos, G.D. Magoulas, and M.N. Vrahatis**, *Nonmonotone Learning Rules For Backpropagation Networks*, In: Proceedings of the 6th IEEE International Conference on Electronics, Circuits and Systems (ICECS '99), 291-294, Pafos, Cyprus, (1999).
4. **G.D. Magoulas, V.P. Plagianakos, and M.N. Vrahatis**, *Effective Neural Network Training with a Different Learning Rate for each Weight*, In: Proceedings of the 6th IEEE International Conference on Electronics, Circuits and Systems (ICECS '99), 591-594, Pafos, Cyprus, (1999).
5. **G.D. Magoulas, V.P. Plagianakos, and M.N. Vrahatis**, *Sign-methods for Training with Imprecise Error Function and Gradient Values*, In: Proceedings of the IEEE International Joint Conference on Neural Networks (IJCNN'99), Washington D.C., U.S.A., (1999).
6. **M.N. Vrahatis, G.D. Magoulas, and V.P. Plagianakos**, *Convergence Analysis of the Quickprop Method*, In: Proceedings of the IEEE International Joint Conference on Neural Networks (IJCNN'99), Washington D.C., U.S.A., (1999).
7. **V.P. Plagianakos, M.N. Vrahatis, and G.D. Magoulas**, *Nonmonotone Methods for Backpropagation Training with Adaptive Learning Rate*, In: Proceedings of the IEEE International Joint Conference on Neural Networks (IJCNN'99), Washington D.C., U.S.A., (1999).
8. **V.P. Plagianakos, G.D. Magoulas, and M.N. Vrahatis**, *Optimization Strategies and Backpropagation Neural Networks,* In: Proceedings of the Seventh Hellenic Conference on Informatics, Ioannina, Greece, (1999).
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