

**Grigorios N. Beligiannis**

**University of Patras (<http://www.upatras.gr/en>)**



**Department of Business Administration of Food and Agricultural Enterprises (<http://www.deapt.upatras.gr/>)**

**Rank: Professor (<http://www.deapt.upatras.gr/el/component/sppagebuilder?view=page&id=117>)**

**Knowledge Area: Intelligent Information Systems**

**Laboratory: Laboratory of Agribusiness Management**

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### **Academic Titles**

- Diploma of Computer Engineering and Informatics, Department of Computer Engineering and Informatics, University of Patras, 1997.
- MSc in “Computer Science and Computer Technology”, Department of Computer Engineering and Informatics, University of Patras, 2000.
- PhD in “Evolutionary Systems for Digital Signal Processing of Stochastic Signals”, Department of Computer Engineering and Informatics, University of Patras, 2002.

### **Research Interests**

- Artificial Intelligence - Computational Intelligence - Machine Learning.
- Artificial Neural Networks - Genetic/Evolutionary Algorithms - Genetic Programming, Evolution Strategies – Metaheuristic Swarm Algorithms.
- Design and Application of Hybrid Intelligent Algorithms for solving timetabling and scheduling problems, dynamic systems modeling and resource optimization.
- Design and Development of Information Systems - Intelligent Information Systems in the AgroFood Sector – Intelligent Information Systems in Education and Lifelong Training.
- Applications of Hybrid Intelligent Information Systems for modeling real-world timeseries belonging to linear and non-linear systems (bio-signals, financial data, data for simulation and modelling of agricultural applications, data for user/student modeling, etc.)

### **Publications**

He has published 42 articles in international scientific journals, 45 articles in proceedings of international conferences and 3 chapters in scientific books.

### **Citations (16/11/2020)**

*Scopus*: **505**, h-index: **13**

*Scholar Google*: **962**, h-index: **18**, i10-index: **25**

## Member in Editorial Boards

- Associate Editor for International Journal of Artificial Intelligence (IJAI)
- Editorial Board Member for Applied Soft Computing
- Editorial Board Member for Artificial Intelligence Research (AIR)
- Editorial Board Member for EC Agriculture
- Editorial Board Member of International Journal of Cyber Forensics and Advanced Threat Investigations

## Referee in Journals / Magazines

He is an active referee in 28 international scientific journals and has completed over 200 reviews.

## Member of the Program Committee

He has been member of the Program Committee in 77 international scientific conferences.

## Referee in Conferences

He has been a referee in 45 international scientific conferences.

## Publications in Journals

- A1. **S. K. Katsikas, S. D. Likothanassis, G. N. Beligiannis K. G. Berketis and D. A. Fotakis, "Genetically Determined Variable Structure Multiple Model Estimation", *IEEE Transactions on Signal Processing*, Volume 49, No. 10, pp. 2253-2261, October 2001, (published by IEEE monthly, Impact Factor 2001: 1.268) (<http://ieeexplore.ieee.org/iel5/78/20569/00950781.pdf>). (Λίστες: ISI, Scopus, Scholar Google)**
- A2. **G. N. Beligiannis, E. N. Demiris and S. D. Likothanassis, "EVOLUTIONARY NON LINEAR MULTI MODEL PARTITIONING FILTERS", *Journal of Advanced Computational Intelligence and Intelligent Informatics*, special issue on Selected Papers WISP'99, Vol.5 No.1, pp. 8-14, 2001, (published by Fuji Technology Press Ltd. bimonthly) (<http://www.fujipress.jp/finder/xslt.php?mode=present&inputfile=JACII000500010002.xml>). (Λίστες: Scopus, DBLP, Scholar Google)**
- A3. **G. A. Tsirogiannis, G. N. Beligiannis, S. D. Likothanassis, and M. N. Vrahatis, "Evolutionary Algorithms For Computing Zeros Of Nonlinear Functions", *Nonlinear Analysis, Theory, Methods & Applications*, Volume 47, No.5, pp. 3437-3442, August 2001, (published by Elsevier Science monthly, Impact Factor 2001: 0.406, [doi:10.1016/S0362-546X\(01\)00460-6](https://doi.org/10.1016/S0362-546X(01)00460-6)). (Λίστες: ISI, Scopus, Scholar Google)**
- A4. **S. D. Likothannassis, G. N. Beligiannis, D. A. Fotakis, D. K. Fragoudis and K. Giotopoulos, "AN EVOLUTIONARY COMPUTATION TECHNIQUE FOR USER PROFILE OPTIMIZATION", *International Journal of Computers and Their Applications*, Vol.10, No.1, pp. 25-33, March 2003, (published by International Society for Computers and their Applications quarterly, <http://www.isca-hq.org/j-list.htm>). (Λίστες: DBLP, Scholar Google)**

- A5. **G. N. Beligiannis, L. V. Skarlas and S. D. Likothanassis, “A Generic Applied Evolutionary Hybrid Technique for Adaptive System Modeling and Information Mining”,** *IEEE Signal Processing Magazine*, special issue on “Signal Processing for Mining Information”, Vol. 21, No. 3, pp. 28-38, May 2004, (published by IEEE bimonthly, Impact Factor 2004: 3.707, [http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=1296540](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1296540)). (Λίστες: ISI, Scopus, Scholar Google)
- A6. **Lambros V. Skarlas, Grigorios N. Beligiannis, Efstratios F. Georgopoulos and Adam V. Adamopoulos, “Intelligent Modeling of the Electrical Activity of the Human Heart”,** *International Journal of Medical, Health, Pharmaceutical and Biomedical Engineering*, Vol. 1 No. 9, pp. 546-549, 2007, (former *International Journal of Signal Processing*, Vol. 1, No. 1, pp. 38-41, Winter 2005), (published by World Academy of Science Engineering and Technology quarterly, <http://www.waset.org/publications/11530>). (Λίστες: Scholar Google, CiteSeer<sup>x</sup>)
- A7. **Grigorios N. Beligiannis, Georgios A. Tsirogiannis and Panayotis E. Pintelas, “Restartings: A Technique to Improve Classic Genetic Algorithms’ Performance”,** *International Journal of Chemical, Nuclear, Metallurgical and Materials Engineering*, Vol. 1, No. 1, pp. 24-27, 2007, (former *International Journal of Computational Intelligence*, Vol. 1, No. 2, pp. 102-105, Spring 2005), (published by World Academy of Science Engineering and Technology quarterly, <http://www.waset.org/publications/12222>). (Λίστες: Scholar Google, CiteSeer<sup>x</sup>)
- A8. **Grigorios N. Beligiannis, Georgios A. Tsirogiannis and Panayotis E. Pintelas, ““Intuition” Operator: Providing Genomes with Reason”,** *International Journal of Computer, Information, Systems and Control Engineering*, Vol. 1, No. 1, pp. 142-145, 2007, (former *International Journal of Computational Intelligence*, Vol. 1, No. 2, pp. 110-113, Spring 2005), (published by World Academy of Science Engineering and Technology quarterly, <http://waset.org/publications/9954/>). (Λίστες: Scholar Google)
- A9. **G. N. Beligiannis, L. V. Skarlas, S. D. Likothanassis and K. Perdikouri, “Nonlinear Model Structure Identification of Complex Biomedical Data Using a Genetic Programming Based Technique”,** *IEEE Transactions on Instrumentation and Measurement*, special issue on Intelligent Signal Processing, Vol. 54, No. 6, pp. 2184-2190, December 2005, (published by IEEE quarterly, Impact Factor 2005: 0.700) (<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1542516>). (Λίστες: ISI, Scopus, Scholar Google)
- A10. **Konstantinos C. Giotopoulos, Christos E. Alexakos, Grigorios N. Beligiannis and Spiridon D. Likothanassis, “Computational Intelligence Techniques and Agents’ Technology in E-learning Environments”,** World Academy of Science, Engineering and Technology, Vol. 2: 2008-10-28, (former *International Journal of Information Technology*, Vol. 2, No. 2, pp. 147-156, Spring 2006), (published by World Academy of Science Engineering and Technology quarterly, <http://www.waset.org/publications/5888>). (Λίστες: Scholar Google)
- A11. **Konstantinos C. Giotopoulos, Christos E. Alexakos, Grigorios N. Beligiannis and Spiridon D. Likothanassis, “Integrating Computational Intelligence Techniques and Assessment Agents in E-Learning Environments”,** *International Journal of Computational Intelligence*, Vol. 3, No. 4, pp. 328-337, Fall 2007, (published by World Academy of Science Engineering and Technology quarterly,

<http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=FDCCDD62D17AED47767C6685B8A1003CB?doi=10.1.1.117.913&rep=rep1&type=pdf> ). (Λίστες: Scholar Google, CiteSeer<sup>x</sup>)

- A12. **C. Koutsojannis, G. Beligiannis, I. Hatzilygeroudis and C. Papavlasopoulos, “Using a Hybrid AI Approach for Exercise Difficulty Level Adaptation”, *International Journal of Continuing Engineering Education and Life-Long Learning (IJCELL)*, Vol. 17, No. 4/5, pp. 256-272, 2007, (published by Inderscience Publishers bimonthly). ([http://www.inderscience.com/search/index.php?action=record&rec\\_id=15042&prevQuery=&ps=10&m=or](http://www.inderscience.com/search/index.php?action=record&rec_id=15042&prevQuery=&ps=10&m=or)). (Λίστες: Scopus, Scholar Google)**
- A13. **Grigorios N. Beligiannis, Charalampos N. Moschopoulos, Georgios P. Kaperonis and Spiridon D. Likothanassis, “Applying evolutionary computation to the school timetabling problem: The Greek case”, *Computers & Operations Research Journal*, 35 (4), pp. 1265-1280, 2008 (published by Elsevier Science monthly, Impact Factor 2008: 1.366, [doi:10.1016/j.cor.2006.08.010](https://doi.org/10.1016/j.cor.2006.08.010)). (Λίστες: ISI, Scopus, DBLP, Scholar Google)**
- A14. **Grigorios N. Beligiannis, Charalampos N. Moschopoulos and Spiridon D. Likothanassis, “A Genetic Algorithm Approach to School Timetabling”, *Journal of the Operational Research Society*, 60(1), 23-42, 2009 (published by Palgrave Macmillan monthly, Impact Factor 2009: 1.009, <http://www.jstor.org/discover/10.2307/20202263?uid=39895&uid=3738128&uid=2129&uid=2&uid=70&uid=3&uid=39894&uid=67&uid=5911304&uid=62&sid=21104361836683>). (Λίστες: ISI, Scopus, DBLP, ABS, Scholar Google)**
- A15. **Konstantinos Theofilatos, Grigorios Beligiannis and Spiridon Likothanassis, “Combining Evolutionary and Stochastic Gradient Techniques for System Identification”, *Journal of Computational and Applied Mathematics*, 227(1), pp. 147-160, May 2009 (published by Elsevier monthly, Impact Factor 2009: 1.292, [doi:10.1016/j.cam.2008.07.014](https://doi.org/10.1016/j.cam.2008.07.014)). (Λίστες: ISI, Scopus, Scholar Google)**
- A16. **Nikolaos Spanoudakis, Konstantina Pendaraki and Grigorios Beligiannis, “Portfolio Construction Using Argumentation and Hybrid Evolutionary Forecasting Algorithms”, *International Journal of Hybrid Intelligent Systems (IJHIS)*, 6(4), pp. 231-243, 2009, (published by IOS Press, quarterly, <http://iospress.metapress.com/content/2475582466510147/>). (Λίστες: DBLP, Scholar Google)**
- A17. **A. G. Toutouzis and G. N. Beligiannis, “Analysis, Design and Development of an Information System for the Calculation and Management of a Company’s Cash Flow”, *HELLENIC OPEN UNIVERSITY JOURNAL OF INFORMATICS – HOUJOI*, Vol 2, No 1, pp. 16-42, 2009, (published by Hellenic Open University, annually, <http://nefeli.dsmc.eap.gr/ojs-2.1.1/index.php/HOUJOI/article/viewFile/25/17>). (Λίστες: Scholar Google)**
- A18. **Giotopoulos K., Alexakos C., Beligiannis G, and Stefani A. “Bringing AI to E-learning: the case of a modular, highly adaptive system”, *International Journal of Information and Communications Technology Education (IJICTE)*, 6(2), pp. 24-35, 2010, (published by IGI Global, quarterly, <http://www.igi-global.com/article/bringing-learning-case-modular-highly/42139> ). (Λίστες: Scopus, Scholar Google)**

- A19. **Aglaia Liopa-Tsakalidi, Dimitrios Savvas, Grigorios Beligiannis, “Modelling the Richards Function using Evolutionary Algorithms on the effect of electrical conductivity of nutrient solution on zucchini growth in hydroponic culture”, *Simulation Modelling Practice and Theory*, 18(9), pp. 1266-1273, 2010 (published by Elsevier monthly, Impact Factor 2010: 0.799, <http://www.sciencedirect.com/science/article/pii/S1569190X1000081X>). (Λίστες: ISI, Scopus, Scholar Google)**
- A20. **Aglaia Liopa-Tsakalidis, S. KONSTANTINIDOU-DOLTSINIS, G. N. BELIGIANNIS, "Studying the Effect of Fungicides on Tomato Plant Growth Using Richards' Function and Evolutionary Algorithms", *Journal of Information Technology in Agriculture*, special issue on Selected Papers from ITAFFE 10 Conference, Vol 4, No 1, 2011 (ISSN: 1546-959X), (<http://www.jitag.org/ojs/index.php/jitag/article/view/125>). (Λίστες: Scholar Google)**
- A21. **Vassilios D. Papadopoulos, Grigorios N. Beligiannis, Dimitra G. Hela, “Combining experimental design and artificial neural networks for the determination of chlorinated compounds in fish using matrix solid-phase dispersion”, *Applied Soft Computing*, 11(8), pp. 5155-5164, 2011, (published by Elsevier monthly, Impact Factor 2011: 2.612, <http://www.sciencedirect.com/science/article/pii/S1568494611002043>). (Λίστες: ISI, Scopus, Scholar Google)**
- A22. **Ioannis X. Tassopoulos, Grigorios N. Beligiannis, “Solving effectively the school timetabling problem using particle swarm optimization”, *Expert Systems with Applications*, 39(5), pp. 6029-6040, 2012 (published by Elsevier monthly, Impact Factor 2012: 1.854, <http://www.sciencedirect.com/science/article/pii/S0957417411016848>). (Λίστες: ISI, Scopus, Scholar Google)**
- A23. **Moschopoulos C, Beligiannis G, Likothanassis S, Kossida S, “Using a genetic algorithm and markov clustering on protein-protein interaction graphs”, *International Journal of Systems Biology and Biomedical Technologies (IJSBBT)*, 1(2), 35-47, 2012, (<http://www.igi-global.com/article/using-genetic-algorithm-markov-clustering/67105>). (Λίστες: Scholar Google)**
- A24. **Ioannis X. Tassopoulos, Grigorios N. Beligiannis, “Using particle swarm optimization to solve effectively the school timetabling problem”, *Soft Computing*, 16(7), pp. 1229-1252, 2012 (published by Springer monthly, Impact Factor 2012: 1.124, <http://link.springer.com/article/10.1007%2Fs00500-012-0809-5#page-1>). (Λίστες: ISI, Scopus, Scholar Google)**
- A25. **Ioannis X. Tassopoulos, Grigorios N. Beligiannis, “A hybrid particle swarm optimization based algorithm for high school timetabling problems”, *Applied Soft Computing*, 12(11), pp. 3472-3489, 2012 (published by Elsevier monthly, Impact Factor 2012: 2.140, <http://www.sciencedirect.com/science/article/pii/S1568494612002876>). (Λίστες: ISI, Scopus, Scholar Google)**
- A26. **Solos, I.P., Tassopoulos, I.X., Beligiannis, G.N. A Generic Two-Phase Stochastic Variable Neighborhood Approach for Effectively Solving the Nurse Rostering Problem. *Algorithms* 2013, 6, 278-308, <http://www.mdpi.com/1999-4893/6/2/278>). (Λίστες: Scopus, Scholar Google)**

- A27. **Panagiotis N. Kechagiopoulos and Grigorios N. Beligiannis, “Solving the urban transit routing problem using a particle swarm optimization based algorithm”, *Applied Soft Computing*, 12, pp. 654-676, 2014 (published by Elsevier monthly, Impact Factor 2014: 2.810, <http://www.sciencedirect.com/science/article/pii/S1568494614001689>), (Λίστες: ISI, Scopus, Scholar Google).**
- A28. **Ioannis X. Tassopoulos, Ioannis P. Solos and Grigorios N. Beligiannis, “A two-phase adaptive variable neighborhood approach for nurse rostering”, *Computers & Operations Research Journal*, 60, pp. 150-169, 2015 (published by Elsevier Science monthly, Impact Factor 2014: 1.718, [doi:10.1016/j.cor.2015.02.009](https://doi.org/10.1016/j.cor.2015.02.009)). (Λίστες: ISI, Scopus, DBLP, Scholar Google)**
- A29. **Katsaragakis I.V., Tassopoulos, I.X., Beligiannis, G.N., “A Comparative Study of Modern Heuristics on the School Timetabling Problem”, *Algorithms* 2015, 8, 723-742, <http://www.mdpi.com/1999-4893/8/3/723/pdf>. (Λίστες: Scopus, Emerging Sources Citation Index (ESCI - Web of Science, Scholar Google)**
- A30. **Solos, I.P., Tassopoulos, I.X. and Beligiannis, G.N., “An Effective Stochastic Variable Neighbourhood Approach to Shift Scheduling for Tank Trucks”, *International Journal of Artificial Intelligence*, 14(1), pp. 1-26, 2016. (Λίστες: Scopus, Scholar Google)**
- A31. **Skoullis, V.I., Tassopoulos, I.X., Beligiannis, G.N., “Solving the high school timetabling problem using a hybrid cat swarm optimization based algorithm”, *Applied Soft Computing*, 52, pp. 277-289, 2017 (published by Elsevier monthly, Impact Factor 2017: 3.907. (Λίστες: ISI, Scopus, Scholar Google)**
- A32. **Mitsos, B., Beligiannis, G.N., “An overview of food businesses in the Western Greece and the extent to which they use information systems”, *International Journal of Sustainable Agricultural Management and Informatics*, 4(1), pp. 23-32, 2018. (Λίστες: Scopus, Scholar Google)**
- A33. **Pliakoura, A, Beligiannis, G and Kontogeorgos, A, “Mobile Device Applications Usability Assessment: The example of an Agricultural Management Application”, *Journal of Agricultural Informatics* (ISSN 2061-862X), Vol. 9, No. 3:55-64, 2018.**
- A34. **Bill Mitsos, Achilleas Kontogeorgos, Grigorios Beligiannis, “Information systems and software used by food businesses in Western Greece”, *International Journal of Business Continuity and Risk Management*, 9(2), pp. 153-170, 2019, DOI: 10.1504/IJBCRM.2019.098805. (Λίστες: Scopus, Scholar Google)**
- A35. **Hera Antonopoulou, Constantinos Halkiopoulos, Olympia Barlou, Grigorios N. Beligiannis, “Transition from Educational Leadership to e-Leadership: A Data Analysis Report from TEI of Western Greece”, *International Journal of Learning, Teaching and Educational Research*, 18(9), pp. 238-255, 2019. (Λίστες: Scopus, Scholar Google)**
- A36. **Christina Iliopoulou, Ioannis Tassopoulos, Konstantinos Kepaptoglou and Grigorios Beligiannis, “Electric Transit Route Network Design Problem: Model and Application”, *Transportation Research Record*, 2673(8), pp. 264-274, 2019. (Λίστες: Scopus, Scholar Google)**



- A37. **A. Πλιακούρα Α., Μπεληγιάννης Γ., Κοντογεώργος Α., «Το Αγροτικό Συνεταιριστικό Μοντέλο Επιχειρηματικότητας Μέσα από τη Διεθνή Βιβλιογραφία», *Κοινωνική Οικονομία*, ISSN 2407-9626, Τεύχος 18, Δεκέμβριος 2019.**
- A38. **Alexandra Pliakoura, Grigorios Beligiannis, Achilleas Kontogeorgos “Use and Satisfaction with Integrated Learning Management Systems: The case of the Greek Open eClass”, *International Journal of Innovation in Education*, 6(2) 2020. (Λίστες: Scholar Google)**
- A39. **Ioannis X. Tassopoulos, Christina A. Iliopoulou and Grigorios N. Beligiannis, “Solving the Greek school timetabling problem by a Mixed Integer Programming model”, *Journal of the Operational Research Society*, 71(1), pp. 117-132, 2020. (Λίστες: ISI, Scopus, DBLP, ABS, Scholar Google)**
- A40. **Hera Antonopoulou, Constantinos Halkiopoulos, Olympia Barlou, Grigorios N. Beligiannis, “Leadership types and digital leadership in higher education: behavioural data analysis from University of Patras in Greece”, *Education and Training* 19(4), pp. 110-129, 2020. (Λίστες: Scopus, Scholar Google)**
- A41. **Iosif V. Katsaragakis, Ioannis X. Tassopoulos, Grigorios N. Beligiannis, “Solving the Urban Transit Routing Problem Using a Cat Swarm Optimization-Based Algorithm”, *Algorithms* 2020, 13, 223; doi:10.3390/a13090223. (Λίστες: Scopus, Emerging Sources Citation Index (ESCI - Web of Science, Scholar Google)**
- A42. **Alexandra Pliakoura, Grigorios Beligiannis, Achilleas Kontogeorgos “Education in Agricultural entrepreneurship: training needs and learning practices”, *International Journal of Innovation in Education*, in press. (Λίστες: Scopus, Scholar Google)**

## Publications in Conference Proceedings

- B1. **G. N. Beligiannis, K. G. Berkettis, S. D. Likothanassis and D. A. Fotakis, “Evolutionary Multimodel Partitioning Filters for Multivariable Systems”, IX European Signal Processing Conference (EUSIPCO-98), pp. 2149-2152, Island of Rhodes, Greece, September 8-11, 1998. (Υποβολή με full paper). (Λίστες: Scopus, Scholar Google)**
- B2. **G. N. Beligiannis, E. N. Demiris and S. D. Likothanassis, "EVOLUTIONARY AR MODEL IDENTIFICATION WITH UNKNOWN PROCESS ORDER", 6th IEEE International Workshop on Intelligent Signal Processing and Communication Systems (ISPACS '98), pp. 854-858, Melbourne, Australia, November 4-6, 1998. (Υποβολή με full paper) (Λίστες: Scholar Google)**
- B3. **G. N. Beligiannis, E. N. Demiris and S. D. Likothanassis, “EVOLUTIONARY ARMA MODEL IDENTIFICATION WITH UNKNOWN PROCESS ORDER”, 3<sup>rd</sup> IMACS/IEEE International Conference on Circuits, Systems and Computers (CSCC'99), pp. 1951-1958, Athens, Greece, July 4-8, 1999. (Υποβολή με full paper). (Λίστες: Scopus, Scholar Google)**
- B4. **E. N. Demiris, S. D. Likothanassis and G. N. Beligiannis, “NONLINEAR AR MODEL IDENTIFICATION WITH UNKNOWN PROCESS ORDER”, 3<sup>rd</sup> IMACS/IEEE International Conference**

- on Circuits, Systems and Computers (CSCC'99), pp. 3151-3156, Athens, Greece, July 4-8, 1999. (Υποβολή με full paper) ([Λίστες](#): Scopus, Scholar Google)
- B5. **G. N. Beligiannis, E. N. Demiris and S. D. Likothanassis, "EVOLUTIONARY MULTIMODEL PARTITIONING FILTERS FOR NONLINEAR SYSTEMS"**, Genetic and Evolutionary Computation Conference (GECCO'99) (poster), Orlando, Florida USA, July 14-17, 1999. (Υποβολή με full paper). ([Λίστες](#): Scopus, DBLP, Scholar Google)
- B6. **G. N. Beligiannis, S. D. Likothanassis and S. K. Katsikas, "Evolutionary System Identification Using Multi Model Partitioning Theory"**, 5<sup>th</sup> International Conference on Information Systems Analysis and Synthesis (ISAS'99), vol. VI, pp. 469-475, Orlando, USA, July 31 – August 4, 1999. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B7. **G. N. Beligiannis, E. N. Demiris and S. D. Likothanassis, "EVOLUTIONARY NON-LINEAR MULTI MODEL PARTITIONING FILTERS"**, IEEE International Workshop on Intelligent Signal Processing (WISP'99), pp. 77-82, Budapest, Hungary, September 4-7, 1999. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B8. **G. N. Beligiannis, E. N. Demiris and S. D. Likothanassis, "Self-Adaptive Evolution Strategies for ARMA Model Identification"**, X European Signal Processing Conference (EUSIPCO 2000), Tampere, Finland, September 5-8, 2000. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B9. **E. N. Demiris, S. D. Likothanassis, G. N. Beligiannis and A. V. Adamopoulos, "NONLINEAR AR MODEL IDENTIFICATION WITH UNKNOWN PROCESS ORDER"**, IEEE International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2000), pp.777-782, Honolulu, Hawaii, USA, November 5-8, 2000. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B10. **G. N. Beligiannis, S. D. Likothanassis and D. G. Lainiotis, "Evolutionary Parameter Quantization for Adaptive Estimation"**, 2nd IEEE International Workshop on Intelligent Signal Processing (WISP 2001), pp. 111-113, Budapest, Hungary, May 24-25, 2001. (Υποβολή με full paper) ([Λίστες](#): Scholar Google)
- B11. **G. N. Beligiannis, S. D. Likothanassis and E. N. Demiris, "A Robust Hybrid Evolutionary Method for ARMA Model Identification"**, 2nd IEEE R8-EURASIP Symposium on Image and Signal Processing and Analysis (ISPA'01), pp. 633-638, Pula, Croatia, June 19-21, 2001. (Υποβολή με full paper) ([Λίστες](#): Scholar Google)
- B12. **A. V. Adamopoulos, P. A. Anninos, S.D. Likothanassis, E. F. Georgopoulos & G. N. Beligiannis, "Genetically Optimized Multi-Layered Perceptrons for the Prediction of Biomagnetic Signals"**, NNESMED 2001 – NEURAL NETWORKS AND EXPERT SYSTEMS IN MEDICINE AND HEALTHCARE, pp. 81-83, Milos Island, Greece, 20-22 June 2001. (Υποβολή με abstract) ([Λίστες](#): Scholar Google)
- B13. **A. Adamopoulos, P. Anninos, E. Demiris, S. Likothanassis and G. Beligiannis, "Evolutionary Multimodel Analysis of the Fetal Magnetocardiogram"**, EUROGEN 2001



- Evolutionary Methods for Design, Optimisation and Control with Applications to Industrial Problems, pp. 305-310, International Center for Numerical Methods in Engineering (Cmine), Athens, Greece, 19-21 September 2001. (Υποβολή με extended abstract) ([Λίστες: Scholar Google](#))
- B14. **Γ. Μπεληγιάννης, Κ. Γιωτόπουλος, Σ. Λυκοθανάσης, Γ. Πασχάλης και Π. Πιντέλας**, “Χρήση Τεχνικών Υπολογιστικής Νοημοσύνης για τη Βελτιστοποίηση Μοντέλου Μαθητή”, 5ο Πανελλήνιο Συνέδριο, Διδακτική των Μαθηματικών και Πληροφορική στην Εκπαίδευση, poster, Πανεπιστήμιο Μακεδονία, Θεσσαλονίκη, 12-14 Οκτωβρίου, 2001. (Υποβολή με abstract)
- B15. **S. D. Likothanassis, G. N. Beligiannis, D. A. Fotakis, D. K. Fragoudis and K. Giotopoulos**, “AN EVOLUTIONARY COMPUTATION TECHNIQUE FOR USER PROFILE OPTIMIZATION”, 3<sup>rd</sup> International Conference on Information Reuse and Integration (IRI-2001), pp. 24-29, Luxor Hotel, Las Vegas, Nevada USA, November 27-29, 2001. (Υποβολή με full paper). ([Λίστες: DBLP, Scholar Google](#))
- B16. **A. V. Adamopoulos, E. N. Demiris, S. D. Likothanassis, G. N. Beligiannis and P. A. Anninos**, “Adaptive Multimode Analysis of the Magnetoencephalogram of Epileptic Patients”, European Symposium on Intelligent Technologies, Hybrid Systems and their implementation on Smart Adaptive Systems (EUNITE 2001), pp. 417-422, Tenerife, Spain, 13-14 December 2001. (Υποβολή με full paper) ([Λίστες: Scholar Google](#))
- B17. **G. N. Beligiannis, K. C. Giotopoulos, S. D. Likothanassis, G. P. Paschalis and P. Pintelas**, “STUDENT MODEL OPTIMIZATION USING EVOLUTIONARY COMPUTATION TECHNIQUES”, NETWORKED LEARNING IN A GLOBAL ENVIRONMENT (NL-2002), Challenges and Solutions for Virtual Education, Technical University of Berlin, Germany, May 1-4, 2002. (Υποβολή με full paper) ([Λίστες: Scholar Google](#))
- B18. **A. V. Adamopoulos, P. A. Anninos, S. D. Likothanassis, G. N. Beligiannis, L. V. Skarlas, E. N. Demiris and P. Papadopoulos**, “Evolutionary Self-adaptive Multimodel Prediction Algorithms of the Fetal Magnetocardiogram”, 14<sup>th</sup> International Conference on Digital Signal Processing (DSP 2002), Vol. II, pp. 1149-1152, Santorini, Greece, 1-3 July, 2002. (Υποβολή με full paper) ([Λίστες: Scholar Google](#))
- B19. **G. N. Beligiannis, S. D. Likothanassis and L. V. Skarlas**, “Evolutionary Multi-Model Estimators for ARMA System Modeling and Time Series Prediction”, 7<sup>th</sup> International Work Conference on Artificial and Natural Neural Networks (IWANN2003), Vol. II, pp. 409-416, Mahón, Menorca (Balearic Islands, Spain), June 3-6, 2003. Also in *Lectures Notes in Computer Science* (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Vol. 2687, pp. 409-416, Springer – Verlag Heidelberg, 2003. (Υποβολή με full paper) ([Λίστες: ISI, Scopus, DBLP, Scholar Google](#))
- B20. **G. N. Beligiannis, L. V. Skarlas, S. D. Likothanassis and K. Perdikouri**, “Nonlinear Model Structure Identification of Complex Biomedical Data Using a Genetic Programming Based Technique”, 3<sup>rd</sup> IEEE International Workshop on Intelligent Signal Processing (WISP 2003), pp.249-254, Budapest, Hungary, 4-6 September, 2003. (Υποβολή με full paper) ([Λίστες: Scholar](#))

Google)

- B21. **Christos Giannoulis, Grigorios Beligiannis, Spiridon Likothanassis, Ioannis Hatzilygeroudis and Lambros Skarlas, “Novel Fitness Functions in Genetic Algorithms for Human Immune System Simulation”, 3<sup>rd</sup> Hellenic Conference on Artificial Intelligence (SETN’2004), pp. 149-158, Samos, Greece, 5-8 May, 2004. (Υποβολή με full paper) ([Λίστες](#): Scholar Google)**
- B22. **Grigorios N. Beligiannis, Georgios A. Tsirogiannis, Panayotis E. Pintelas, “Restartings: A Technique to Improve Classic Genetic Algorithms’ Performance”, International Conference on Computational Intelligence (ICCI 2004), pp. 404-407, Istanbul, Turkey, 17<sup>th</sup>-19<sup>th</sup> December, 2004. (Υποβολή με full paper). ([Λίστες](#): DBLP, Scholar Google)**
- B23. **Grigorios N. Beligiannis, Georgios A. Tsirogiannis and Panayotis E. Pintelas, ““Intuition” Operator: Providing Genomes with Reason”, International Conference on Computational Intelligence (ICCI 2004), pp. 65-68, Istanbul, Turkey, 17<sup>th</sup>-19<sup>th</sup> December, 2004. (Υποβολή με full paper). ([Λίστες](#): DBLP, Scholar Google)**
- B24. **Lambros V. Skarlas, Grigorios N. Beligiannis, Efstratios F. Georgopoulos and Adam V. Adamopoulos, “Modeling the Electrical Activity of the Human Heart Using an Artificial Neural Network”, International Conference on Signal Processing (ICSP 2004), pp. 134-137, Istanbul, Turkey, 17<sup>th</sup>-19<sup>th</sup> December, 2004. (Υποβολή με full paper)**
- B25. **Konstantinos C. Giotopoulos, Christos E. Alexakos, Grigorios N. Beligiannis and Spiridon D. Likothanassis, “Integrating Agents and Computational Intelligence Techniques in E-learning Environments”, International Conference on Computational Intelligence (ICCI 2005), pp. 231-238, Prague, Czech Republic, 26<sup>th</sup>-28<sup>th</sup> August, 2005. Also in *Transactions on Engineering, Computing and Technology*, 7, 2005. (Υποβολή με full paper) ([Λίστες](#): Scopus, DBLP, Scholar Google)**
- B26. **Constantinos Koutsojannis, Grigorios Beligiannis, Ioannis Hatzilygeroudis, Constantinos Papavaslopoulos “Using a Hybrid AI Approach for Exercise Difficulty Level Adaptation”, International Workshop on Combining Intelligent and Adaptive Hypermedia Methods/Techniques in Web Based Education Systems (CIAH ’05), in conjunction with the Sixteenth ACM Conference on Hypertext and Hypermedia (HT 2005), pp. 45-52, Salzburg, Austria, 6<sup>th</sup>-9<sup>th</sup> September, 2005. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)**
- B27. **G. N. Beligiannis, “Evolutionary Lainiotis' Algorithms for System Identification: A Survey”, 12<sup>th</sup> International Workshop on Systems, Signals & Image Processing (IWSSIP 2005), pp. 63-67, Chalkida, Greece, 22<sup>nd</sup> – 24<sup>th</sup> September, 2005. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)**
- B28. **Christos E. Alexakos, Konstantinos C. Giotopoulos, Eleni J. Thermogianni, Grigorios N. Beligiannis, Spiridon D. Likothanassis, “Integrating E-learning Environments with Computational Intelligence Assessment Agents”, 3<sup>rd</sup> International Conference on Computer Science (ICCS 2006), 13<sup>th</sup> World Enformatika Conference, pp. 233-238, Budapest, Hungary, 26<sup>th</sup>-28<sup>th</sup> May, 2006. Also in *Transactions on Engineering, Computing and Technology*, 13, pp. 233-238, 2006. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)**

- B29. **Grigorios Beligiannis, Ioannis Hatzilygeroudis, Constantinos Koutsojannis and Jim Prentzas, “A GA Driven Intelligent System for Medical Diagnosis”**, Proceedings of the 10<sup>th</sup> International Conference on Knowledge-Based & Intelligent Information & Engineering Systems (KES 2006), Bournemouth International Conference Centre, 9<sup>th</sup>–11<sup>th</sup> October, 2006. (Υποβολή με full paper, acceptance rate: 34%). Also in *Lecture Notes in Computer Science* (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 4251 LNAI - I, pp. 968-975, Springer – Verlag Heidelberg, 2006. (Υποβολή με full paper). (Λίστες: ISI, Scopus, DBLP, Scholar Google)
- B30. **Konstantinos Theofilatos, Grigorios N. Beligiannis and Spiridon D. Likothanassis, “Combining Evolutionary and Stochastic Gradient Techniques for System Identification”**, Conference in Numerical Analysis (NUMAN 2007) – Recent Approaches to Numerical Analysis: Theory, Methods and Applications, 3<sup>rd</sup>-7<sup>th</sup> September 2007, Kalamata, Greece. (Υποβολή με extended abstract). (Λίστες: Scholar Google)
- B31. **Charalampos N. Moschopoulos, Panagiotis Tsiatsis, Grigorios N. Beligiannis, Dimitrios Fotakis and Spiridon D. Likothanassis, “Dealing with Large Datasets Using An Artificial Intelligence Clustering Tool”**, 1<sup>st</sup> International Workshop on Applications with Artificial Intelligence, in conjunction with the IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2007), 29<sup>th</sup>-31<sup>st</sup> October 2007, Patras, Greece. Also in C. Koutsojannis and S. Sirmakessis (Eds.), *Tools and Applications with Artificial Intelligence*, Studies in Computational Intelligence 166, pp. 105-120, Springer-Verlag, Berlin, Heidelberg, 2009. (Υποβολή με full paper). (Λίστες: Scopus, DBLP, Scholar Google)
- B32. **Charalampos N. Moschopoulos, Christos E. Alexakos, Christina Dosi, Grigorios N. Beligiannis and Spiridon D. Likothanassis, “A User-Friendly Evolutionary Tool for High-School Timetabling”**, 1<sup>st</sup> International Workshop on Applications with Artificial Intelligence, in conjunction with the IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2007), 29<sup>th</sup>-31<sup>st</sup> October 2007, Patras, Greece. Also in C. Koutsojannis and S. Sirmakessis (Eds.), *Tools and Applications with Artificial Intelligence*, Studies in Computational Intelligence 166, pp. 149-162, Springer-Verlag, Berlin, Heidelberg, 2009. (Υποβολή με full paper). (Λίστες: Scopus, DBLP, Scholar Google)
- B33. **Nikolaos Spanoudakis, Konstantina Pendaraki and Grigorios Beligiannis, “COMBINING ARGUMENTATION AND HYBRID EVOLUTIONARY SYSTEMS IN A PORTFOLIO CONSTRUCTION APPLICATION”**, 1<sup>st</sup> International Workshop on Combining Intelligent Methods and Applications (CIMA 2008), in conjunction with the European Conference on Artificial Intelligence (ECAI 2008), pp. 59-64, 21<sup>st</sup>-22<sup>nd</sup> July 2008, Patras, Greece. (Υποβολή με full paper). (Λίστες: Scholar Google)
- B34. **A. Liopa-Tsakalidi, S Konstantinidou-Doltsinis, G. N. Beligiannis, “Studying the Effect of Fungicides on Tomato Plant Growth by Modeling the Richards Function Using Evolutionary Algorithms”**, 3<sup>rd</sup> International Congress on Information and Communication Technologies in Agriculture, Food, Forestry and Environment (ITAFFE’10), June 14-18, 2010, Ondokuz Mayıs University, Samsun, Turkey. (Υποβολή με abstract). (Λίστες: Scholar Google)
- B35. **A. Liopa-Tsakalidi, S Konstantinidou-Doltsinis, G. N. Beligiannis, “Studies on the Efficacy of Extracts of *Reynoutria Sachalinensis* on Cucumber Growth Using the Richards Function and Evolutionary Modelling”**, Proceedings of the 33<sup>rd</sup> International Conference on Information

- Technology Interfaces (ITI 2011), pp. 545-550, June 27-30, Cavtat/Dubrovnik, Croatia. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B36. **Charalampos Moschopoulos, Grigorios Beligiannis, Sophia Kossida and Spiridon Likothanassis, “Optimizing filter processes on protein interaction clustering results using genetic algorithms”**, Proceedings of the 1<sup>st</sup> Workshop on Computational Intelligence Applications in Bioinformatics (CIAB 2011) in conjunction with the 12<sup>th</sup> EANN / 7<sup>th</sup> AIAI Joint Conferences, Corfu, Greece, 15-18 September, 2011. Also in *Engineering Applications of Neural Networks*, IFIP Advances in Information and Communication Technology, Volume 363/2011, Springer Boston, 2011, pp. 463-470. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B37. **Perlis, V., Akasiadis, C., Theofilatos, K., Beligiannis, G.N., Likothanassis, S.D., “Applying computational intelligence approaches to the staff scheduling problem”**, ECTA 2011, FCTA 2011 - Proceedings of the International Conference on Evolutionary Computation Theory and Applications and International Conference on Fuzzy Computation Theory and Applications, pp. 168-173, 24-26 October, 2011, Paris, France. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B38. **C. Moschopoulos, D. Popovic, A. Sifrim, G. Beligiannis, B. De Moor, Y. Moreau, “A Genetic Algorithm for Pancreatic Cancer Diagnosis”**, Proceedings of the 14<sup>th</sup> International Conference EANN 2013, Halkidiki, Greece, September 13-16, 2013. Also in *Engineering Applications of Neural Networks*, Volume 384, 2013, pp 222-230. (Υποβολή με full paper). ([Λίστες](#): Scopus, Scholar Google)
- B39. **Katsaragakis, I.V., Tassopoulos I.X. and Beligiannis, G.N., “A comparative study of population based algorithms on the school timetabling problem”**, 14<sup>th</sup> Special Conference of the Hellenic Operational Research Society, 11<sup>th</sup> Meeting of Multicriteria Decision Analysis, 12-14 March 2015, Agrinio, Greece, pp. 29-30.
- B40. **Solos, I.P., Tassopoulos I.X. and Beligiannis, G.N., “Solving efficiently the nurse rostering problem using variable neighborhood search algorithms”**, 14<sup>th</sup> Special Conference of the Hellenic Operational Research Society, 11<sup>th</sup> Meeting of Multicriteria Decision Analysis, 12-14 March 2015, Agrinio, Greece, pp. 31-32.
- B41. **Πλιακούρα Αλεξάνδρα, Μπεληγιάννης Γρηγόριος, Κοντογεώργος Αχιλλέας, «Χρήση και Ικανοποίηση από τα Ολοκληρωμένα Συστήματα Διαχείρισης: Η Περίπτωση του e Class του Πανεπιστημίου Πατρών»**, 2<sup>ο</sup> Πανελλήνιο Συνέδριο με Διεθνή Συμμετοχή – «Ελλάδα-Ευρώπη 2020: Εκπαίδευση, Δια βίου Μάθηση, Έρευνα, Νέες Τεχνολογίες, Καινοτομία και Οικονομία», 28-30 Σεπτεμβρίου 2018, Λαμία, Ελλάδα.
- B42. **Πλιακούρα Αλεξάνδρα, Μπεληγιάννης Γρηγόριος, Κοντογεώργος Αχιλλέας «Τεχνολογίες Πληροφορικής και Επικοινωνιών στη διαχείριση Αγροτικών Εκμεταλλεύσεων. Αξιολόγηση της εφαρμογής “agrofarm”»**, Πρακτικά 15ου Πανελληνίου Συνεδρίου Αγροτικής Οικονομίας, Επαναπροσδιορίζοντας την Ανάπτυξη της Υπαίθρου στη Σύγχρονη Ψηφιακή Εποχή, 1-2 Νοεμβρίου 2018, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης, Αίθουσα Κέντρου Διάδοσης Ερευνητικών Αποτελεσμάτων, Θεσσαλονίκη, Ελλάδα, pp. 115-116.
- B43. **B. Μήτσος, Α. Κοντογεώργος και Γ. Μπεληγιάννης, «Ο βαθμός χρήσης των πληροφοριακών συστημάτων από τις επιχειρήσεις τροφίμων στη Δυτική Ελλάδα»**, Πρακτικά 15ου

Πανελληνίου Συνεδρίου Αγροτικής Οικονομίας, Επαναπροσδιορίζοντας την Ανάπτυξη της Υπαίθρου στη Σύγχρονη Ψηφιακή Εποχή, 1-2 Νοεμβρίου 2018, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης, Αίθουσα Κέντρου Διάδοσης Ερευνητικών Αποτελεσμάτων, Θεσσαλονίκη, Ελλάδα, pp. 187-188.

- B44. **Bill Mitsos, Axilleas Kontogeorgos, Grigorios Beligiannis, “What information systems are used by food businesses in Western Greece?”**, 12th EFITA International Conference, June 27-29, 2019, Rhodes Island, Greece.
- B45. **Alexandra Pliakoura, Grigorios Beligiannis, Achilleas Kontogeorgos and Fotios Chatzitheodoridis, “Investigating Farmers’ Entrepreneurial Intention: Some Evidence from Greece”**, 12th International Conference Economies of the Balkan and Eastern European Countries, EBEEC 2020, May 29-31, 2020, Opatija, Croatia.

### Publications in Book Chapters

- Γ1. **N. Spanoudakis, K. Pendaraki and G. Beligiannis, “Portfolio Construction Using Argumentation and Hybrid Evolutionary Forecasting Algorithms”**, Computational Intelligence for Trading and Investment, Edited by Christian Dunis, Spiros Likothanassis, Andreas Karathanasopoulos, Georgios Sermpinis, Konstantinos Theofilatos, Series: Routledge Advances in Experimental and Computable Economics, Routledge, 2013, pp. 146-174 (<http://www.amazon.co.uk/Computational-Intelligence-Techniques-Investment-Experimental/dp/toc/0415636809>).
- Γ2. **Konstantina Pendaraki, Grigorios N. Beligiannis and Alexandra Lappa, “Mutual Fund Prediction Models Using Artificial Neural Networks and Genetic Programming”**, In: *Mutual Funds. Performance, Types, and Impacts on Stock Returns*, D. Edwards (Ed.), Nova Science Publishers, Inc., New York, 2017, pp. 93-127, ISBN: 978-1-53610-633-6.
- Γ3. **Alexandra Pliakoura, Grigorios Beligiannis, Achilleas Kontogeorgos, “Enhancing Agricultural Entrepreneurship Through Mobile Applications in Greece: The Case of a “Farm Management” Application”**, In: *Opportunities and Strategic Use of Agribusiness Information Systems*, Ferdinand Ndifor Che, Kenneth D. Strang and Narasimha Rao Vajjhala (Eds.), IGI Global, 2021, pp. 93-127, ISBN13: 9781799848493, ISBN10: 1799848493, <http://doi:10.4018/978-1-7998-4849-3>.