CURRICULUM VITAE

(1 page summary / contents)

NAME	Vassilis G. Kaburlasos		
BIRTH DATE	24 September 1963		
MAILING ADDRESS	Department of Computer and Informatics Engineering Eastern Macedonia and Thrace Institute of Technology (EMATTECH) GR-65404, Kavala Greece		
POSITION	Tenured "full" Professor		
TELEPHONES	+30 (2510) 462 320 (Work) +30 (694) 522 4802 (Mobile)		
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WEB PAGE	http://scholar.google.com/citations?user=3RiPf3wAAAAJ		
STATEMENT OF INTEREST	Computational Intelligence (CI) modeling and Human-Machines Interaction (HMI). Applications toward the development of competitive industrial products and services. Global scientific actions and initiatives.		
EDUCATION	 Diploma in Electrical and Computer Engineering, National Technical University of Athens, Greece (October 1986) M.Sc. in Electrical Engineering, University of Nevada, Reno, USA (December 1989) Ph.D. in Electrical Engineering, University of Nevada, Reno, USA (May 1992) 		
EXPERIENCE	Research (basic & applied) Higher Education Teaching Miscellaneous		
LIST OF PUBLICATIONS	Publications in Books, Journals, Conferences. Theses, Technical Reports, and Teaching Notes are also included.		
IMPACT	Third party citations, <i>h-index</i> .		

EXPERIENCE

Research

Basic Research	Proposed the Lattice Computing (LC) information processing paradigm for a unified, rigorous treatment of disparate types of data including (non)numerical data such as real number tables, functions, sets, set partitions, logic values, (binary) relations, strings of symbols, etc. Development of (parametric) computational intelligence modeling techniques for clustering, classification and regression.
Applied Research (Participation in Research Projects)	 <u>ISDN</u>: Simulation of different data routing algorithms for an Integrated Services Digital Network (ISDN). National Technical University of Athens, Greece. Spring & Summer 1986, as a student, during diploma thesis. Funded by the European Union. <u>WHIPLASH INJURY DIAGNOSIS</u>: Development of image processing and neural computing techniques for the diagnosis of whiplash injury on thermal (infrared) images. University of Nevada, Reno. Sep. 1988- May 1989, as a research assistant, during Master's Thesis. Funded by Computerized Thermography Centers/ IFEX Inc., New York, NY. <u>MEDICAL DIAGNOSIS</u>: Development and application of neural network techniques for the discovery of unanticipated and emerging disease and medical practice patterns. University of Nevada, Reno. Jun. 1991 – Dec. 1991, as a research assistant, during Ph.D. dissertation. Funded by Washoe Medical Center, Reno, Nevada. <u>MITOS project (BE7470)</u>: Research and development of intelligent sensing and control strategies for mechatronic tools in four surgical procedures. Automation & Robotics Laboratory (ARL), Aristotle University of Thessaloniki, Greece. Mar. 1994 – Feb. 1997, as a research associate. Funded by the European Union in the context of Brite Euram (BE) project BE7470 (MITOS project). <u>SET MARKS</u>: Information processing technologies. Department of Electrical & Computer Engineering, Aristotle University of Thessaloniki, Greece. May 1997 – Dec. 1997, as a research associate. Funded by the European Union.
	 6) <u>GENOS</u>: Research regarding a system for an optimal management of energy resources. Department of Electrical & Computer Engineering, Aristotle University of Thessaloniki, Greece. Mar. 1997 – Dec. 1997, as a research associate. Funded by the European Union. 7) <u>MTS (PL 950317)</u>: A human network for linking industrial, medical, and research centers of the European Union towards the development of mechatronic tools in medical surgeries. Mar. 1996 – Feb. 1999, as a research associate. Funded by the European Union. 8) <u>ACES</u>: Development and Internet application of the interactive Automatic Control Educational Software (ACES). ACES involved hypertext and intelligent modules for both distant self-learning and self-evaluation in two undergraduate <i>Automatic Control</i> courses. Department of Electrical & Computer Engineering, Aristotle University of Thessaloniki, Greece. Jan. 1998 – May 2000, as a research associate. Funded by the General Secretariat of Research and Technology of Greece. 9) <u>VENFLEX (CT98-5312)</u>: Robotic vision for recognition and manipulation of flexible materials. Automation & Robotics Laboratory (ARL), Aristotle University of Thessaloniki, Greece. Jan. 2000 – Jul. 2000, as a research associate. Funded by the European Union. 10) <u>KTESIBIOS</u>: A human network linking research centers, universities, and commercial companies in Greece towards the dissemination of information technologies for industrial automation and production. Jun. 2000 – Jun. 2001, as a research associate. Funded by the General Secretariat of Research and Technology of Greece. 11) <u>HSU</u>: Research and development of novel computational intelligence techniques for prediction of sugar production from sugar beets cultivation data. Automation & Robotics Laboratory (ARL), Aristotle University of Thessaloniki, Greece. Jul. 2000 – Jun. 2001, as a research associate. Funded by Hellenic Sugar Industry (HSU), Greece. 12) <u>PARES</u>: Development and Internet application of the interacti

Curriculum Development (CRCD) in "Machine Learning Advances for Engineering Education" at the University of Central Florida. Jun. 2003 – Jun. 2005, as an Academic Affiliate in the Advisory Board (URL: http:// www.seecs.ucf.edu/ ml/ advisory_board.htm). Funded by the National Science Foundation (NSF).

14) <u>PA CO CLIR:</u> Parallel, content based cross language information retrieval. Department of Informatics, Technological Educational Institution of Athens, Greece. 2004-2006, as an investigator. Funded by the 3rd European framework programme via the Operational Programme in Education and Initial Vocational Training II under project *Archimedes*.

15) <u>SHOP</u>: Software for simulating a human-operator in industrial production (SHOP) using neuro-fuzzy models based on disparate types of data. Department of Industrial Informatics, Technological Educational Institution of Kavala, Greece. Jan. 2004 – Jun 2007, as the principal investigator. Funded by the 3^{rd} European framework programme via the Operational Programme in Education and Initial Vocational Training II, under project *Archimedes*.

16) <u>D_FRUIT</u>: Design, development and application of an "intelligent" electronic measurement device for measuring temperature and humidity in a processing (heating) dry fruits oven. The objective was to identify an optimum temperature-humidity combination to stop heating the dry fruits so that to improve quality of the product for the market. Jul. – Oct. 2007, as the principal investigator. Funded by "KARPOS dry fruit company" via the Center for Technological Research of Eastern Macedonia & Thrace, Kavala, Greece.

17) <u>IMAGFINs</u>: Development and application of techniques for representing digital images using vectors of Fuzzy Interval Numbers (FINs, for short), where a FIN represents a distribution of measurements. Then, based on the aforementioned techniques, we developed novel digital image classification algorithms. Sep. 2008 – May 2009, as a principal investigator. Funded by Technological Educational Institution of Kavala, Greece.

18) <u>CDI</u>: International collaboration to study oceanic currents phenomena and climate changes through cross-mining and retrieval multispectral satellite image and sensor network data. Principal Investigator (PI) Professor James Z. Wang, The Pennsylvania State University, USA. Sep. 2010 – Jun. 2015, as a collaborator. Funded by the National Science Foundation (NSF) USA.

19) <u>EXTRA</u>: Design, development and industrial application of an automatic control electronic system, which implemented (in software) novel fuzzy lattice reasoning (FLR) techniques. The objective was to compute and pump the quantities of the constituent liquids required for the production of a requested quantity of "ouzo" (alcoholic beverage) according to specifications. Apr. 2011 – Aug. 2011, as the principal investigator. Funded by "EXTRA company" via the Center for Technological Research of Eastern Macedonia & Thrace, Kavala, Greece.

20) <u>BRAINimaging</u>: Computational intelligence techniques for brain imaging and the neurosciences. Principal Investigator (PI) Professor Manuel Graña, University of the Basque Country, San Sebastian, Spain. Jan. 2012 – Dec. 2014, as a collaborator. Funded by the Ministry of Science and Innovation, Government of Spain.

21) <u>SECRET_DIDWE</u>: Secure Retrieval and Dissemination of Information (text and image) in Distributed and Wireless specific purpose Environments. Department of Informatics, Technological Educational Institution of Athens, Greece. Mar. 2012 – Aug. 2014, as an investigator. Funded by the Operational Programme in Education and Life Long Learning under project *Archimedes III*.

• <u>Lab *Electrical Communications*</u>: Basic analog and digital telecommunication circuits. National Technical University of Athens, Greece. 12 hours in the lab. Spring 1987, as a student assistant. Funded by the National Technical University of Athens.

• <u>Class Signals & Systems</u>: Basic information and communication theory, information measure, noise measure, pulse and continuous signal modulation and detection systems. University of Nevada, Reno, class EE381. 40 hours in the classroom. Spring 1988, as a teaching assistant. Funded by the University of Nevada, Reno.

• <u>Class Circuits & Systems</u>: Analysis and design of linear circuits and systems in the time and frequency domains. University of Nevada, Reno, class EE301. 40 hours in the classroom. Spring 1990, as a teaching assistant. Funded by the University of Nevada, Reno.

• <u>Lab *Electrical Projects*</u>: Implementation of measurement techniques on complex systems by electrical means. University of Nevada, Reno, class EE490. 30 hours in the lab. Fall 1990, as

Higher Education Teaching

a teaching assistant. Funded by the University of Nevada, Reno.

• <u>Lab Intelligent Robots</u>: Design and application of neural networks in various benchmark pattern recognition problems. Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece. 15 hours in the lab per semester. Fall 1998, 1999, 2000.

• <u>Lab Automatic Control Systems</u>: Design of linear state feedback control systems. Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece. 15 hours in the lab per semester. Spring semesters of 1999, 2000, 2001.

• <u>Lab Classic Automatic Control</u>: Design of classic feedback control systems. Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece. 20 hours in the lab per semester. Fall semesters of 1999, 2000.

• <u>SELETE (continuing education) seminar</u>: Training high school educators. Instruction included the use of the MATLAB software for designing controllers in classic automatic control problems. Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece. 15 hours in the lab per semester. Fall 1998, Spring 1999.

• <u>Novel-Technologies Seminar</u>: Topics included 1) Neural Networks, and 2) Neuro-fuzzy controllers. Faculty of Engineering, Aristotle University of Thessaloniki, Greece. 9 teaching hours. May 2000, as a seminar instructor. Funded by the General Secretariat of Research and Technology of Greece, under the human network KTESIBIOS.

• <u>Lab Intelligent Control</u>: Application of basic neural-fuzzy controller design principles. Department of Automation, Technological Educational Institution of Thessaloniki, Greece. For four semesters, Fall 2000 to Spring 2002, as a visiting professor.

• <u>Lab Artificial Intelligence</u>: Solving problems with PROLOG language. Department of Informatics, Technological Educational Institution of Thessaloniki, Greece. Fall 2001, Spring 2002, as a visiting professor.

• <u>Lab Computer Programming</u>: Programming in C++ computer language. Department of Informatics, Technological Educational Institution of Thessaloniki, Greece. Fall 2001, Spring 2002, as a visiting professor.

• <u>Graduate class Machine Learning</u>: In charge of teaching *data clustering techniques* in the context of the graduate course *Machine Learning*. Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece. 3 lectures per semester since the Spring semesters of 2004 and 2005, as a visiting Professor. Funded by the 3rd European framework programme.

• <u>Theory & Labs</u>: In charge of teaching three courses 1) *Computational Intelligence Systems*, 4) *Artificial Intelligence and Logic Programming*, and 3) *Robotics and Industrial Automation Systems*, in the Department of Computer and Informatics Engineering, Eastern Macedonia and Thrace Institute of Technology, Greece, as a tenured Professor since 2002.

Miscellaneous

International Educational Exchange

• He was selected by the Department of Inter-University Relations of the Greek Ministry for Education, Life-long Learning and Religious Affairs to visit a Belgian Flemish Institution under a Bilateral Educational Program in 2011 Applicants were (a) members of the academy of Athens, (b) higher education teaching and/or administration personnel, and (c) researchers and PhD candidates. A total number of 46 applicants were selected. Prof. Kaburlasos followed an invitation of his Belgian colleague Prof. Da Ruan towards visiting the (a) Belgian Nuclear research Centre (SCK-CEN) at Mol, and (b) Department of Applied Mathematics & Computer Science of Gent University, to deliver a series of lectures and collaborate with other colleagues on issues of a (mathematical) unification in Informatics.

• In the context of educational program "Erasmus", on 11 June 2013 he visited Département du Signale at des Images, CNRS LTCI, Telecom Paris Tech in Paris (France) following an invitation of professor Isabelle Bloch for collaboration regarding digital signal processing and lattice computing issues.

In the context of educational program "Erasmus", on 12 June 2013 he visited the Verimag, Integrative Research Center (CRI) laboratory in Grenoble (France) following an invitation of professor Joseph Sifakis for collaboration regarding a unification of analog and digital system models and lattice computing issues.

• In the context of educational program "Erasmus", during 29-31 October 2014 he visited the Institut für Neuroinformatik in Ruhr-Universität Bochum (Germanu) following an invitation of professor Gregor Schöner for collaboration regarding the potential submission of a

research project proposal in the context of the European Framework Program Horizon 2020.

Founder

• Founding member of the Greek Chapter of the IEEE Education Society, December 5, 2004, Athens.

Research Seminar Organizer

• Academic year 2002-2003 in the TEI of Kavala he organized a series of research seminars with participation 5+9=14 speakers from both academia and local industry.

• Academic year 2013-2014 in the Eastern Macedonia and Thrace Institute of Technology he organized a series of research lectures (1 lecture per month) for the faculty members of the institution toward getting to know each others research.

Professional, scientific & honor societies

- 1. Technical Chamber of Greece,
- 2. IEEE Computational Intelligence Society,
- 3. IEEE Systems, Man, and Cybernetics Society,
- 4. IEEE Computer Society,
- 5. Sigma Xi, the Scientific Research Society (Swiss chapter),
- 6. Phi Kappa Phi, the National Honor Society (USA),
- 7. Tau Beta Pi, the National Engineering Honor Society (USA),
- 8. Eta Kappa Nu, the Electrical Engineering Honor Society (USA),
- 9. Delta Phi Alpha, the German Honor Society (USA).
- EUCogIII 3rd European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics

Reviewer in the following SCI (Science Citation Index) journals

- 1) IEEE Transactions on Systems, Man and Cybernetics.
- 2) IEEE Transactions on Neural Networks.
- 3) IEEE Transactions on Fuzzy Systems.
- 5) Neural Networks.
- 6) Decision Support Systems.
- 7) Information Sciences: An International Journal.
- 8) Journal of Multiple-Valued Logic and Soft Computing.

9) Neurocomputing.

- 10) Computers and Mathematics with Applications.
- 11) Journal of Information Science.
- 12) Engineering Intelligent Systems.
- 13) IEEE Intelligent Systems.
- 14) Neural Network World.
- 15) Journal of Mathematical Imaging and Vision.
- 16) Neural Computing & Applications.
- 17) Mathematical and Computer Modelling.
- 18) Soft Computing.
- 19) Mathematical Problems in Engineering.

20) IET Image Processing.

- 21) Advances in Fuzzy Systems.
- 22) Annals of Mathematics and Artificial Intelligence.
- 23) Artificial Intelligence Review.

24) Information Fusion.

25) Pattern Recognition Letters.

26) Sensors.

- 27) IEEE Computational Intelligence Magazine.
- 28) Computational Intelligence and Neuroscience.

Conference Program Committees

1) FUZZ-IEEE 2004 International Conference on Fuzzy Systems, 25-29 July 2004, Budapest, Hungary. Chair of the (poster) session entitled: "System Architectures and Hardware", Tuesday, July 27, 5:30PM-7:00PM.

2) Optics and Photonics 2005 (sponsored by SPIE – The International Society for Optical Engineering), 31 July – 4 August 2005, San Diego, California, USA. Program Committee of the session OEI321 entitled: "Fuzzy Set Theory and Neural Network Methods in Image Analysis and Pattern Recognition" (chaired by G.X. Ritter & I.L.D.L. Santiago).

3) World Congress on Computational Intelligence (WCCI 2006) 16-21 July 2001, Vancouver, BC, Canada. Lead chairman of three oral special sessions entitled: "Computational Intelligence Based on Lattice Theory" of the program FUZZ-IEEE 2006, Monday, July 17, 8:00AM-10:00AM, 1:00PM-3:00PM, 3:15PM-5:15PM. The other two chairs were G.X. Ritter and M. Georgiopoulos.

4) 8th International Conference on Natural Computing, 15-22 July 2007, Salt Lake City, Utah, USA. Member of the Program Committee chaired by Manuel Graña.

5) World Congress on Computational Intelligence (WCCI 2008) 1-6 June 2008, Hong Kong, China. Member of the Technical Committee.

6) 6th International Conference on Concept Lattices and their Applications (CLA 2008), 21-23 October 2008, Olomouc, Czech Republic. Lead chairman of a Workshop entitled "Lattice-Based Modeling (LBM 2008)". The other two chairs were U. Priss and M. Graña.

7) International Conference on Statistical Technics in Pattern Recognition (SPR 2008), 4-22 December 2008, Orlando, Florida, USA. Member of the Program Committee chaired by Michael Georgiopoulos.

8) 4th International ICSC Symposium on Information Technologies in Environmental Engineering (ITEE) 2009, 28-29 May 2009, Thessaloniki, Greece. Member of the Program Committee chaired by Ioannis N. Athanasiadis, Pericles A. Mitkas, Andrea-Emilio Rizzoli, Jorge Marx-Gómez.

9) 5th International Conference on Hybrid Artificial Intelligence Systems (HAIS 2010), 23-25 June 2010, San Sebastian, Spain. Lead chairman of two oral special sessions entitled: "Hybrid Artificial Intelligence Systems Based on Lattice Theory". The other two chairs were C. Joslyn και J. Humberto Sossa.

10) International Joint Conference on Neural Networks (IJCNN 2011), 31 July - 5 August 2011, San Jose, California, USA. Program Committee member (session chair) with Program Chair Prof. Hava Siegelmann.

11) The 8th International Conference on Concept Lattices and Their Applications (CLA 2011), 17-21 October 2011, INRIA Nancy Grand Est/LORIA Nancy, France. Program Committee member (session chair) with Program Chairs Amedeo Napoli and Vilem Vychodil.

12) 7th International Conference on Hybrid Artificial Intelligence Systems (HAIS'12) 28-30 March 2012, Salamanca, Spain. Program Committee member with General Chair Prof. Emilio Corchado.

13) 10th International FLINS Conference on Uncertainty Modeling in Knowledge Engineering and Decision Making (FLINS 2012) 26-29 August 2012, Istanbul, Turkey. Chairman of three oral Special Session entitled "Logic Algebra, Algebraic Logic and Their Applications". The other two chairs were Yang XU και Jun Liu.

14) 9th International Conference on Concept Lattices and Their Applications (CLA 2012),
11-14 October 2012, Fuengirola (Málaga), Spain. Program Committee, session chair.
Program Chairs were Uta Priss and Laszlo Szathmary.

15) 10th International Conference on Concept Lattices and Their Applications (CLA 2013), 15-18 October 2013, La Rochelle, France. Program Committee, session chair. Program Chairs were Manuel Ojeda-Aciego and Jan Outrata.

16) 2013 IEEE International Conference on Imaging Systems and Techniques (IST 2013) 22-23 October 2013 Beijung, China. Technical Program Committee. General Chair was George Giakos.

17) World Congress on Computational Intelligence (WCCI 2014) 6-11 July 2014, Beijing, China. The chairman of a Special Session entitled "Lattice Computing", FUZZ-IEEE program.

<u>Invited Speaker</u>

1) Plenary speaker during the annual general assembly of the Swiss chapter of Sigma-Xi, the Scientific Research Society, 19 April 1997, Bern, Switzerland. The lecture theme has been "Imitating Life: An Engineering Approach".

2) Speaker in the seminar "Theory, Applications, and Perspectives of Neural Net

Technology" organized by the "Neuron, Human Network" and sponsored by the Greek Ministry of Industry, Research & Technology, 13 October 1997, Thessaloniki, Greece.

3) Speaker in the first workshop of the human network KTESIBIOS, under the auspices of the General Secretariat of Research and Technology of Greece. Athens, Greece, 23 June 2000. Subject: "Educational Software for Automatic Control Systems".

4) Invited speaker of the 9th International Work-conference on Artificial Neural Networks (IWANN'2007), San Sebastian, Spain, 20-22 June 2007.

5) Presentation entitled "AI Based on Lattice Theory" in Workshop B, on Sunday 11 October 2009, 11:30-13:00 (presided by Vincent Müller), EUCogII Members' Conference 2009 of the Human Network "2nd European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics", 10-11 October 2009, Hamburg, Germany.

6) Invited speaker in a Workshop entitled "Trends on Computational Intelligence 2009" in the Universidad del Pais Vasco. San Sebastian, Spain, 9-11 December 2009. The Workshop was organized by Professor Manuel Graña Romay from the Department of Computer Science and Artificial Intelligenceκαι. The presentation was entitled "Advantages of using Lattice Theory in Computational Intelligence".

7) Elected participant in the 38-member conference entitled "Challenges for Cognitive Systems" in Rapperswil, Switzerland, 28-30 January 2011 in the context of the Human Network "2nd European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics". This conference formulated a proposal for the upcoming European research direction on "Artificial Cognitive Systems, Interaction and Robotics".

8) Organizer of a parallel session entitled "Unified Lattice Computing for Unified Cognitive System Design and Applications" in the context of the fourth conference of the human network "2nd European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics (EUCogII)", 11-12 April 2011 in Thessaloniki, Greece. This initiative concluded with the submission of an FP research proposal to the European Union from a consortium including research teams from Spain (1), United Kingtom (1), Belgium (1) Sweden (1) Czech Republik (1) and Greece (2) with Principal Investigator (PI) Prof. Vassilis Kaburlasos.

9) Flashtalk EUCog members presentation entitled "The Novel, Lattice Computing Paradigm (LCparadigm) for Versatile Learning" on Thursday 11 April 2013, 16:30-17:30 (presided by Vincent Müller) of the Human Network "3rd European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics (EUCogIII)", 10-11 April 2013, Palma de Mallorca, Spain.

10) Delivered two 2-hours long (each) lectures in Southwest Jiaotong University, Chengdu, Sichuan, China on Thursday 3 July and Friday 4 July 2014 in the department of Electrical Engineering and the School of Mathematics, respectively, after a personal invitation of professor Yang Xu from the School of Mathematics.

11) Delivered one presentation entitled "GUardian Agent Robot squaDs (GUARDs)" in the context of the conference "Successful R&I in Europe 2014 - 6th European Networking" organized by the State of North Rhine - Westfalia in Düsseldorf (Germany) in 30-31 November 2014.

PhD degree supervisor

• Member of the Ph.D. Committee for Mr. Ivan Villaverde de la Nava whose Ph.D. was conferred in December 2009 from the Universidad del País Vasco, Ciencias de la Computación e Inteligencia Artificial, San Sebastian, Spain with title "On Computational Intelligence Tools for Vision Based Navigation of Mobile Robots" and supervisor professor Manuel Graña Romay. Mr. Ivan Villaverde de la Nava carried out part of his Ph.D. work, as an exchange student, from 15 September 2008 to 15 December 2008 (3 months) in the Department of Industrial Informatics under the guidance of professor Kaburlasos.

• Member of the Ph.D. Committee for Miss. Darya Chyzhyk whose Ph.D. was conferred in July 2013 from the Universidad del País Vasco, Ciencias de la Computación e Inteligencia Artificial, San Sebastian, Spain with title "Contributions of Lattice Computing to Medical Image Processing" and supervisor professor Manuel Graña Romay.

Evaluator of Funded Research Programs

On 2 October 2013 he was invited by the Republic of Cyprus regarding the program "Young Researcher" for the year 2013 to serve as an evaluator with expertise on

(a) Computational Neuroscience, (b) Computational Intelligence, (c) Machine Learning.

Administrative

1) <u>School year 1990-1991</u>: Elected vice-chairman for the student chapter of the Institute of Electrical and Electronics Engineers (IEEE) in Northern Nevada, USA.

2) <u>2003-2004</u>, <u>2009-2011</u>: Chairman of the Division of Computing Systems in the Department of Industrial Informatics at the Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece.

3) <u>2003-2004</u>, <u>2009-2011</u>: Vice chairman of the Department of Industrial Informatics at the Eastern Macedonia and Thrace Institute of Technology</u>, Kavala, Greece.

4) <u>2004-2008</u>: Director of the Sector of Informatics Applications in the Center for Technological Research of the Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece.

5) <u>2009-today:</u> Director of the "Human-Machines Interaction" Laboratory in the Department of Industrial Informatics at the Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece (approval is pending).

6) <u>2011-2013</u>: Chairman of the Department of Industrial Informatics at the Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece.

7) <u>2012-2016</u>: Elected member of the Council of the Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece.

LIST OF PUBLICATIONS

Research Monographs (RM)

[RM#1] V.G. Kaburlasos, Towards a Unified Modeling and Knowledge-Representation Based on Lattice Theory - Computational Intelligence and Soft Computing Applications. Heidelberg, Germany: Springer, series: Studies in Computational Intelligence, vol. 27, 2006, ISBN: 3-540-34169-2 (http://www.springer.com/3-540-34169-2).

Edited Volumes (EV)

- [EV#1] V.G. Kaburlasos, G.X. Ritter (eds.) Computational Intelligence Based on Lattice Theory. Heidelberg, Germany: Springer, series: Studies in Computational Intelligence, vol. 67, 2007, ISBN: 3-540-72686-9 (http://www.springer.com/3-540-72686-9).
- [EV#2] V. Kaburlasos, U. Priss, M. Graña (eds.), LBM 2008 (CLA 2008), Proceedings of the Lattice-Based Modeling Workshop, in conjunction with The Sixth International Conference on Concept Lattices and Their Applications. Olomouc, Czech Republic: Palacký University, 2008, ISBN: 978-80-244-2112-4
- SCI [EV#3] V.G. Kaburlasos (Guest Editor), Special Issue on: Information Engineering Applications Based on Lattices, *Information Sciences*, vol. 181, iss. 10, pp. 1771-1773, 2011 (16 papers, pp. 1774-2060).

Publications in Scientific Journals (SJ)

- SCI [SJ#1] D.D. Egbert, P.H. Goodman, V.G. Kaburlasos, J.H. Whitchey, "Generalization capabilities of subtle image pattern classifiers", *IEEE Transactions on Knowledge and Data Engineering*, vol. 4, no. 2, pp. 172-177, 1992.
- J [SJ#2] V.G. Kaburlasos, V. Petridis, "Fuzzy Lattice Neurocomputing (FLN) : A novel connectionist scheme for versatile learning and decision making by clustering", *International Journal of Computers and Their Applications*, vol. 4, no. 3, pp. 31-43, 1997.
- SCI [SJ#3] V. Petridis, V.G. Kaburlasos, "Fuzzy lattice neural network (FLNN): a hybrid model for learning", *IEEE Transactions on Neural Networks*, vol. 9, no. 5, pp. 877-890, 1998 (Special Issue on *Neural Networks and Hybrid Intelligent Models: Foundations, Theory, and Applications*. Guest Editors: C. Lee Giles, Ron Sun).
- SCI [SJ#4] V. Petridis, V.G. Kaburlasos, "Learning in the framework of fuzzy lattices", *IEEE Transactions on Fuzzy Systems*, vol. 7, no. 4, pp. 422-440, 1999.

Errata in IEEE Transactions on Fuzzy Systems, vol. 8, no. 2, p. 236, 2000.

- SCIE [SJ#5] V.G. Kaburlasos, V. Petridis, P. Brett, D. Baker, "Estimation of the stapes-bone thickness in stapedotomy surgical procedure using a machine-learning technique", *IEEE Transactions on Information Technology in Biomedicine*, vol. 3, no. 4, pp. 268-277, 1999.
- SCI [SJ#6] V.G. Kaburlasos, V. Petridis, "Fuzzy Lattice Neurocomputing (FLN) models", *Neural Networks*, vol. 13, no. 10, pp. 1145-1170, 2000.
- SCI [SJ#7] V. Petridis, V.G. Kaburlasos, "Clustering and classification in structured data domains using fuzzy lattice neurocomputing (FLN)", *IEEE Transactions on Knowledge and Data Engineering*, vol. 13, no. 2, pp. 245-260, 2001 (Special Section on *Connectionist Models for Learning in Structured Domains*. Guest Editors: Paolo Frasconi, Marco Gori, Alessandro Sperduti).
- SCIE [SJ#8] V.G. Kaburlasos, V. Spais, V. Petridis, L. Petrou, S. Kazarlis, N. Maslaris, A. Kallinakis, "Intelligent clustering techniques for prediction of sugar production", *Mathematics and Computers in Simulation*, vol 60, iss. 3-5, pp. 159-168, 2002 (Special Issue on *Intelligent Forecasting, Fault Diagnosis, Scheduling, and Control.* Guest Editors: Spyros G. Tzafestas, Elpida S. Tzafestas).
- SCI [SJ#9] V. Petridis, S. Kazarlis, V.G. Kaburlasos, "ACES: An interactive software platform for self-instruction and self-evaluation in automatic control systems", *IEEE Transactions on Education*, vol. 46, no. 1, pp. 102-110, 2003.
- SCIE [SJ#10] V. Petridis, V.G. Kaburlasos, "FINkNN: A Fuzzy Interval Number k-Nearest Neighbor classifier for prediction of sugar production from populations of samples", *Journal of Machine Learning Research*, vol. 4(Apr), pp. 17-37, 2003.
- SCIE [SJ#11] A. Kehagias, V. Petridis, V.G. Kaburlasos, P. Fragkou, "A comparison of word- and sense-based text categorization using several classification algorithms", *Journal of Intelligent Information Systems*, vol. 21(Nov), no. 3, pp. 227-247, 2003.
- SCI [SJ#12] V.G. Kaburlasos, "FINs: Lattice theoretic tools for improving prediction of sugar production from populations of measurements", *IEEE Transactions on Systems, Man and Cybernetics – Part B*, vol. 34, no. 2, pp. 1017-1030, 2004.

- SCIE [SJ#13] S.E. Papadakis, P. Tzionas, V.G. Kaburlasos, J.B. Theocharis, "A genetic based approach to the Type I structure identification problem", *Informatica*, vol. 16, no. 3, pp. 365-382, 2005.
- SCI [SJ#14] V.G. Kaburlasos, A. Kehagias, "Novel fuzzy inference system (FIS) analysis and design based on lattice theory. Part I: Working principles", *International Journal of General Systems*, vol. 35, no. 1, pp. 45-67, 2006.
- SCI [SJ#15] V.G. Kaburlasos, S.E. Papadakis, "Granular self-organizing map (grSOM) for structure identification", *Neural Networks*, vol. 19, no. 5, pp. 623-643, 2006.
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LEGEND:

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2	International Journal of Computers and Their Applications	-	1997	
3	IEEE Transactions on Neural Networks	1.405	1998	
	IEEE Transactions on Neural Networks and Learning Systems	4.37		2013/4
4	IEEE Transactions on Fuzzy Systems	1.596	1999	
		2.137		2007
		6.306		2013/4
5	IEEE Transactions on Information Technology in Biomedicine	1.118	1999	
6	Neural Networks	1.221	2000	
		2.000		2006
7	Mathematics and Computers in Simulation	0.316	2002	
8	IEEE Transactions on Education	0.428	2003	
9	Journal of Machine Learning Research	4.317	2003	
10	Journal of Intelligent Information Systems	0.941	2003	
11	IEEE Transactions on Systems, Man and Cybernetics – Part B	1.052	2004	
12	Informatica	0.456	2005	
13	International Journal of General Systems	0.620	2006	
14	International Journal of Approximate Reasoning	1.220	2007	
15	Computers & Education	2.190	2008	
16	Neurocomputing	2.126	2009	
17	Information Sciences	2.833	2010	
		2.833		2011
18	IET Image Processing	0.639	2011	
19	Journal of Mathematical Imaging and Vision	1.767	2012	
20	International Journal of Intelligent Systems	1.416	2012	
21	Pattern Recognition Letters	1.062	2013	
22	Journal of Engineering Science and Technology Review	-	2014	
23	Information Fusion	3.472	2013/4	
24	Journal of Multiple Valued Logic and Soft Computing	0.667	2013/4	
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Teaching Notes

- [H#1] <u>Fall 1998 /Spring 1999:</u> Preparation of a typed-, 45- pages handout with laboratory exercises on controller design using the MATLAB software in the context of the "SELETE program" at the AUTh (for more information see in section *Higher Education Teaching*).
- [H#2] <u>Spring 1999 2001:</u> Preparation of the solutions manual, in HTML format, for the exercises of class *Linear State Feedback Control Systems* at the AUTh including over 100 exercises (for more information see in section *Higher Education Teaching*).

- [H#3] <u>Fall 1999 2000:</u> Preparation of the solutions manual, in HTML format, for the exercises of class *Classic Automatic Control* at the AUTh including over 100 exercises (for more information see in section *Higher Education Teaching*).
- [H#4] <u>Fall 2002-present:</u> Laboratory exercises of class *Intelligent (Fuzzy) Systems* at the TEI-K (for more information see in section *Higher Education Teaching*).

IMPACT

(third-party citations^{*})

	DISTRIBUTION OF CITATIONS per PUBLICATION				
RM#1	32	SJ#18	6	C#8	1
EV#1	27	SJ#19	16	C#10	5
EV#2		SJ#20	8	C#11	1
EV#3	3	SJ#21	15	C#12	12
BC#1	7	SJ#22	14	C#17	1
BC#2	2	SJ#23	5	C#18	3
BC#3	1	SJ#24	3	C#19	6
BC#4		SJ#25	4	C#23	3
BC#5		SJ#26	4	C#24	1
SJ#1	3	SJ#27		C#28	19
SJ#2	14	SJ#28	5	C#30	1
SJ#3	61	SJ#29		C#32	2
SJ#4	21	SJ#30		C#33	13
SJ#5	6	SJ#31		C#35	4
SJ#6	60	SJ#32		C#36	6
SJ#7	23			C#40	3
SJ#8	4			C#41	3
SJ#9	17			C#42	12
SJ#10	13			C#46	2
SJ#11	59			C#47	1
SJ#12	15			C#50	13
SJ#13	6			C#51	3
SJ#14	7			C#52	1
SJ#15	15			C#59	8
SJ#16	9	C#3	1	C#65	7
SJ#17	43	C#6	1	C#67	1

* The detailed list of (third-party) citations is available upon request.

LEGEND:

RM: Research Monograph. EV: Edited Volume. BC: Book Chapter. SJ: Scientific Journal Publication. C: Conference Publication.

	DISTRIBUTION OF CITATIONS per ANNUM per PUBLICATION TYPE						
YEAR	SCIE	J	BK	pt	conf	Т	TOTAL
1992	2			^			2
1993		2					2
1994	1				1		2
1995							
1996	2						2
1997							
1998	1		1				2
1999					2		2
2000	1		2		3		6
2001	2	4	1		1		8
2002	4	3		1			8
2003	6	3	1		4	1	15
2004	6	4	1		9		20
2005	8	4	4		12	1	29
2006	8	8	9		26	2	53
2007	6	8	42	1	16		73
2008	13	3	5	1	43	1	66
2009	21	12	6		9	2	50
2010	13	8	5		10		36
2011	33	8	1		13		55
2012	45	17	7		28		97
2013	54	30	1		14		109
2014	18	16			1		35
TOTAL	244	130	86	3	192	7	662

LEGEND:

SCIE: Science Citation Index Expanded. J: (other) Journal. BK: BooK. pt: patent. conf: conference. T: Tutorial.

h-index calculation for Vassilis G. Kaburlasos

	publication ID	Number of citations
1	SJ#3	61
2	SJ#6	60
3	SJ#11	59
4	SJ#17	43
5	RM#1	32
6	EV#1	27
7	SJ#7	23
8	SJ#4	21
9	C#28	19
10	SJ#9	17
11	SJ#19	16
12	SJ#12	15
13	SJ#15	15
14	SJ#21	15
15	SJ#2	14

Hence, h-index = 14

According to Scopus, as of today, Vassilis Kaburlasos has 715 citations and h-index = 15.

According to Google Scholar, as of today, Vassilis Kaburlasos has 1,307 citations and h-index = 20.