

Assoc. Prof. Dr. Dimitrios A. Karras, PhD
Phd, Electrical & Computer Engineering

Assoc. Professor in “Digital Systems”, National and Kapodistrian University of Athens (NKUA), Evripos Complex, School of Agricultural Development Nutrition and Sustainability, Dept. Agricultural Development, Agrofood and Management of natural Resources, Athens, Greece
(<https://agro.uoa.gr/en/>)

Adjunct Professor, Department of Computer Engineering, EPOKA University, Tirane, Albania
(<https://cen.epoka.edu.al/staff>)

Adjunct Professor, Department of Computer Engineering & Applications, GLA University, India
<https://www.gla.ac.in/academics/faculty-detail/871/prof-dimitrios-karras>

Executive Steering Committee Member, Lincoln University College Malaysia (LUCM) Global Postdoctoral & Researcher Programme
<https://www.lincoln.edu.my/global-postdoctoral-researcher-programme-2/>

Honorary Active Faculty Member Noble International University, NIU, USA, https://niuniversity.org/?page_id=461

Senior Member of Hong Kong Society of Algorithms and Computing Technology (HKSACT) (No: SMDK20240522001Y)

ORCID ID: <http://orcid.org/0000-0002-2759-8482>
WEB OF SCIENCE RESEARCH ID: [AAD-7229-2019](https://orcid.org/0000-0002-2759-8482)

CURRICULUM VITAE

February 2025

1. Personal Information

Last Name: Karras.
First Name: Dimitrios.
Father's Name: Alexios.
Birth Place: Athens, Greece.
Birth Date: 23 May 1959.

Family Status: Married, 3 children.

Military duties: Fulfilled, Greek Navy June 1985- August 1987.

Postal Addresses: Rodou 2, Ano Iliupolis, Postal Code: 16342, Athens, Greece // Perikleous 112, K. Halandri, Postal Code: 15231, Athens, Greece

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Skype: [Dimitrios.a.karras](https://www.skype.com/user/Dimitrios.a.karras)

emails: dakarras@uoa.gr, dimitrios.karras@gmail.com, dkarras@epoka.edu.al, dakarras2010@gmail.com, dakarras@usa.net

web profiles: <https://www.linkedin.com/in/dimitrios-a-karras-39a89826/>
https://www.researchgate.net/profile/Dimitrios_Karras2
<https://www.semanticscholar.org/author/Dimitrios-Alexios-Karras/50453760?sort=pub-date>
<http://scholar.google.com/citations?user=IxQurTMAAAAJ&hl=en>
<https://teiste.academia.edu/DimitriosKarras/CurriculumVita>
<https://en-uoa-gr.academia.edu/DKarras>, <https://en-uoa-gr.academia.edu/DIMITRIOSKARRAS>
<https://sites.google.com/site/karrasdimitriosprof/>

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Senior Member of Hong Kong Society of Algorithms and Computing Technology (HKSACT) (No: SMDK20240522001Y)

1a. Current and Recent Professional Profile

1/1/2019-ongoing: Associate Professor PhD, Tenure-track position, in the subjects of **“Digital Systems, Intelligent Systems, Signal Processing”**, National and Kapodistrian University of Athens (NKUA), School of Science, Dept. General, Evripos Complex, Psachna, Evia, 34400, Greece.

1/9/2023-ongoing: Adjunct Assoc. Professor Dr., Epoka University, Computer Engineering Department, Tirana, Albania (subjects Computer Networking Systems (MSc. & BS Computer Engineering), <https://cen.epoka.edu.al/staff>

07/06/2021-ongoing: Adjunct Professor, Department of Computer Engineering & Applications, GLA University, India, <https://www.gla.ac.in/academics/faculty-detail/871/prof-dimitrios-karras>

30/11/2024-ongoing: Executive Steering Committee Member, Lincoln University College Malaysia (LUCM) Global Postdoctoral & Researcher Programme
<https://www.lincoln.edu.my/global-postdoctoral-researcher-programme-2/>

1/6/2024-ongoing: Principal Researcher, National and Kapodistrian university of Athens (NKUA), Group Leader in the EU funded Horizon project, “ GOV4LL: Governance and business models for living labs: rural regeneration hubs for tackling soil health challenges in the Mediterranean region” (160,000 Euros budget for NKUA).

30/9/2024-ongoing: Honorary Active Faculty Member Noble International University, NIU, USA,
https://niuniversity.org/?page_id=461

1/6/2021-ongoing: Director of Research and Documentation at ADIafrica N.G.O

(<https://www.adiafricadev.org/team>)

1/1/2011- : Project evaluator / panellist for international Research and Development Projects of Informatics and Telecommunications, including evaluation of Centers of Excellence (contracts with Price Waterhouse Coopers Chile, authorized by INNOVA CHILE CORFO, for the installation at Chile of International Centres of Excellence in Informatics/Telecommunications/Biotechnology/Natural Resources Management)

15/2/06 - ongoing: External Collaborator of Greek General Secretary of Research and Greek Informatics Society S.A. as Evaluator of research proposals and progress of Telematics Projects

1/1/1999-ongoing: Consultant / Freelance systems analyst and programmer, indexed as “Applied Sciences Researcher”, in software development projects for the web and .net applications mainly, regarding telematics and databases applications, as well as in engineering education projects.

10/10/2022-2024: Member of the Board of the Governing Council at Brindavan College (BGI), Dwarakanagar, Bagalur Main Road, Yelahanka, Bengaluru-560063, Karnataka, India

1/11/2021-30/9/2023: Adjunct Professor, Department of Software Engineering Head, Canadian Institute of Technology (CIT), Tirana, Albania

1/11/2020-31/10/2022: Senior Researcher, AICO Software, AICO-EDV-Beratung GmbH, Austria, supporting ERA-NET-EVA project, https://evaproject.eu/?page_id=58, project aiming to facilitate urban and regional institutions in tackling critical challenges and steering the transition towards ECAVs, EVA aims at identifying the characteristics of innovative territorial infrastructures capable of effectively supporting these emerging technologies in road mobility.

11/10/2018-25/9/2020: Adjunct Assoc. Professor Dr., Epoka University, Computer Engineering Dept., Tirana, Albania (subjects Distributed Systems (MSc. & BS Computer Engineering), Network Security (MSc. Computer Engineering), Operating Systems (BS Computer Engineering), Integrated Systems (MSc Computer Engineering))

1/8/2018-2020: External Scientific Collaborator, Department of Computer Science and Engineering- European University of Cyprus

1/1/2011-2020: Tutor at Hellenic Fire Academy, SPHY (School of Computer Programmers in Army), Hellenic Police Academy and STYA (Airforce Academy), in the subjects of Informatics, Digital Systems, Electronics, Operating Systems and Networking

9/3/04-31/12/2018: Associate Professor PhD, Tenure-track position, in “Digital Systems, Intelligent Systems, Signal Processing”, Chalkis and Sterea Hellas Institutes of Technology, Department of Automation, Head of the Department (1/09/2006- 15/7/2009), Evripos Complex, Psachna, Evia, 34400, Greece.

1/11/2011-31/10/2015: Scientist in charge/Expert/Senior Consultant in the subject «Exploitation of New Technologies and Information Systems in the Support of small/medium size business organizations», at ESEE (Hellenic Confederation of Commerce and Entrepreneurship), within the framework of ESPA Funding Actions «Human Resources Development» in the programme “Support of small/medium size business organizations”

1/4/2011-30/6/2013: Scientist in charge in the subject «Introduction of Informatics in small/medium size business organizations», Institute of Small/Medium Size Business Organizations GSEBEE (IME GSEBEE), within the framework of ESPA Funding Actions «Continuing Education Programmes for the Human Resources of Small/Medium Business - Activities 7, 8, 9» of the Programme «Learning and Continuing Education»

Computer Programming Skills

Programming Languages expertise/ computer skills: C, C++, C#, Python, Java, Eclipse, SQL, ASP, AJAX, Visual Studio, .NET, Fortran, Ansi/Turbo Pascal, Clipper/Delphi, Assembly

Expertise in: MATLAB, NS3, LabView, MATHEMATICA, Maple, VHDL, PSPICE, ORCAD

Expertise in computer tools: Adobe CS4 (PhotoShop, DreamWeaver, Flash), AutoCad, MS Office

Operating Systems: Windows, Linux, DOS.

2. Education

1/95: Phd in Computer Engineering and Informatics, National Technical University of Athens (NTUA), Dept. Electrical & Computer Engineering (with honors).

3/85: MSc in Electrical & Computer Engineering, National Technical University of Athens (NTUA), Dept. Electrical & Computer Engineering (Telecommunications Engineer).

10/87: Certificate of studies in Computer Engineering and Informatics, National Technical University of Athens (NTUA), Dept. Electrical & Computer Engineering.

6/77: Graduate of the Nationally top-ranked High School of Evangeliki School Smyrnis, Athens, Greece.

1985-1989: Computer, Informatics, Microprocessors, Signal Processing and Automatic Control Seminars participant.

Languages: Oral and written fluency in Greek, (mother tongue) almost complete oral and written fluency in English.

3. Research Experience

Research Positions

5/1988-10/1992: **Research assistant** in the Institute of Informatics and Telecommunications, National Center for Scientific Research (NCSR) DEMOKRITOS, under a scholarship awarded from NCSR DEMOKRITOS, Athens, Greece.

11/1992-12/1994: **Associate researcher participating in EU funded research projects**, of the Institute of Informatics and Telecommunications, National Center for Scientific Research (NCSR) DEMOKRITOS, Athens, Greece.

1/1995-12/1995: **Postdoctoral researcher**, Neural Networks Laboratory, Institute of Informatics and Telecommunications, National Center for Scientific Research (NCSR) DEMOKRITOS, Athens, Greece.

12/1995-31/8/1998: Visiting Assistant Professor (P.D. 407/80), Dept. Informatics, University of Ioannina, Greece.

In parallel, in the period 1/9/1997 – 31/3/1998: **Visiting Assistant Professor (P.D. 407/80) in Medical Informatics**, Dept. Medicine, University of Crete, Greece.

1/9/1998-28/2/1999: Visiting Assistant Professor (P.D. 407/80), Dept. Industrial Mechanical Engineering, University of Thessaly, Greece.

1/9/1998-31/8/2000: Visiting Assistant Professor (P.D. 407/80), Dept Business Administration, University of Piraeus, Greece.

30/9/1998-30/9/2000: Collaborating researcher with the Hellenic Open University, Greece in co-

authoring a book in the subject “Information Systems in the Construction Management”

1/3/1999-31/7/2000 (full time job) and

1/1/2001-31/8/2001 (part time job): **Postdoctoral Senior Researcher, Technical Manager and Deputy Principal Investigator** responsible for the Analysis, Implementation and the Operation of the Tele-education Center of Athens University of Economics and Business (AUEB), Dept. Business Administration, funded through EU and the Ministry of Education. The program “KETHL-AUEB: Tele-education Center of AUEB” was funded within the EPEAEK framework.

Project Objective: To implement and establish an Internet and World Wide Web based Tele-education center suitable for Economics and Business Studies.

1/01/2001- 31/12/2004: **Senior researcher / Principal Industrial Supervisor of the AMEC (Advanced Military Electronic Communications) Group** for the On the Job Training (OJT) of a significant number of MSc theses in Communications/ embedded security systems within the framework of collaboration between Hellenic Aerospace Industry and the University of Portsmouth.

1/10/2002-31/7/2010: **Visiting Professor/Studies Supervisor (SEP), Senior Lecturer**, Subject Section “Computer Networks Basic Issues”, Hellenic Open University, Informatics Dept., Greece

1/9/2003-08/03/2004: **Visiting Assistant Professor (P.D. 407/80)**, Chalkis Institute of Technology, Autom. Dept.

9/3/2004-31/12/2018: **Associate Professor PhD, Tenure-track position, in “Digital Systems, Intelligent Systems, Signal Processing”, Chalkis and Sterea Hellas Institutes of Technology, Department of Automation, Head of the Department (1/09/2006- 15/7/2009), Evripos Complex, Psachna, Evia, 34400, Greece.**

1/9/2007-30/6/2008: **Visiting Professor/Studies Supervisor (SEP), Senior Lecturer**, Teaching MSc postgraduate courses on the Subject Section “*Basic Specializations on Computer Architectures and Networks*”, Open University of Cyprus, Informatics Dept., Cyprus.

11/10/2018-25/9/2020: **Adjunct Assoc. Professor Dr., Epoka University, Computer Engineering Department, Tirana, Albania (subjects Distributed Systems (MSc. & BS Computer Engineering), Network Security (MSc. Computer Engineering), Operating Systems (BS Computer Engineering), Integrated Systems (MSc Computer Engineering))**

1/12/2020-ongoing: **Associate Lecturer Computing (part time, contract not activated yet) Arden University, UK, Berlin Canter**

1/11/2020-31/10/2022: **Senior Researcher, AICO Software, AICO-EDV-Beratung GmbH, Austria, supporting ERA-NET-EVA project, https://evaproject.eu/?page_id=58, project aiming to facilitate urban and regional institutions in tackling critical challenges and steering the transition towards ECAVs, EVA aims at identifying the characteristics of innovative territorial infrastructures capable of effectively supporting these emerging technologies in road mobility.**

1/11/2020-12/2023: **Data Science Instructor, Big Blue Data Academy, Gerliswilstrasse 43, Emmenbrücke, 6020, Lucerne, Switzerland**

1/11/2021-30/9/2023: **Adjunct Professor, Department of Software Engineering Head, Canadian Institute of Technology (CIT), Tirana, Albania**

10/10/2022-2024: **Member of the Board of the Governing Council at Brindavan College (BGI), Dwarakanagar, Bagalur Main Road, Yelahanka, Bengaluru-560063, Karnataka, India**

07/06/2021-ongoing: **Adjunct Professor, Department of Computer Engineering & Applications, GLA University, India, <https://www.gla.ac.in/academics/faculty-detail/871/prof-dimitrios-karras>**

1/6/2024-ongoing: Principal Researcher, National and Kapodistrian university of Athens (NKUA), Group Leader in the EU funded Horizon project, "GOV4LL: Governance and business models for living labs: rural regeneration hubs for tackling soil health challenges in the Mediterranean region" (160,000 Euros budget for NKUA).

30/9/2024-: Honorary Active Faculty Member Noble International University, NIU, USA, https://niuniversity.org/?page_id=461

30/11/2024-ongoing: Executive Steering Committee Member, Lincoln University College Malaysia (LUCM) Global Postdoctoral & Researcher Programme <https://www.lincoln.edu.my/global-postdoctoral-researcher-programme-2/>

1/9/2023-ongoing: Adjunct Associate. Professor Dr., Epoka University, Computer Engineering Department, Tirana, Albania (subjects Computer Networking Systems (MSc. & BS Computer Engineering), <https://cen.epoka.edu.al/staff>

1/1/2019-ongoing: Associate Professor PhD, Tenure-track position, in the subjects of "Digital Systems, Intelligent Systems, Signal Processing", National and Kapodistrian University of Athens (NKUA), School of Science, Dept. General, Evripos Complex, Psachna, Evia, 34400, Greece.

Research Objectives

My Research activities span the Design and Simulation of Intelligent/Adaptive Systems, with emphasis on Machine/Deep Learning and Neural Network Algorithms as well as Computational/Artificial Intelligence Algorithms/Digital-Systems. Moreover, span Pattern Recognition, Decision Support, Learning and Parallel & Distributed Systems. My research efforts involve tools/techniques and applications from/in the following scientific fields:

- **Machine and Deep Learning, Optimization, Pattern Recognition, Data Science and Intelligent Systems (including Computational and Artificial Intelligence as well as Multi-Agent Systems) and Decision Support Systems/ Biomedical Systems as well as Telecommunication Systems with emphasis in Wireless Communication Systems and Wireless Sensor Networks**
- **Complex Systems, Distributed Systems, Fault Tolerance, Sustainability**
- **Digital Signal and Image Processing, Digital systems and computer architectures, Quantum computing and algorithms**
- **Security of Computer and Communication Systems, Electronic Commerce, Management Information Systems, and Web based Learning.**
- **Computer Vision and Robotics.**
- **Systems Control and Identification, Dynamical Systems, Nonlinear Systems, Time Series forecasting, Predictive Analytics.**
- **Qualitative and Quantitative Systems/ Data & Big Data Analytics, Fast Algorithms**

Moreover, my research activities include involvement in the simulation phase of implementing the proposed algorithms in electronic hardware (SPICE simulation of analog Neural Networks, VHDL & FPGA prototyping & implementation of Intelligent/ Signal-Image processing/ Security-Cryptography systems) and development of embedded applications (especially with the 8051 microprocessor for telecommunication projects, within the framework of collaboration between Hellenic Aerospace Industry and the University of Portsmouth).

Research activities within EU and Nationally funded R&D projects

Research Activities within EU funded projects:

- **Member of the Principal Research Group, as research assistant and associate researcher,**

during all phases of the EU funded Research & Development project "Neural Networks" (14 DHMO1), within the framework of SPA 1, 1991-1994 **(250,000 Euros budget)** .

- **Member of the Principal Research Group, as associate and postdoctoral researcher**, during all phases of the EU funded Basic Research project "Ultrasonic Scanner - Quantitative Dynamic Imaging" (CT-93-1292), within the framework of BIOMED I, 1/1/1994 –31/12/1995 **(100,000 Euros budget)**.
- **Member of the Principal Research Group, as postdoctoral and senior researcher**, during all phases of the EU funded Research project "NEURON", within the framework of Research Dissemination Networks managed by the General Secretariat for Research & Technology, Greece, 1/1/1996- 4/1998 **(20,000 Euros budget)**.
- **Member of the Principal Research Group, as collaborating senior researcher**, during all phases of the EU funded Research project "Implementation of Improved Robotics Systems Using Dynamic Optical Information and Robust Techniques of Automatic Control", within the framework of PENED, 3/96 – 12/96 **(30,000 Euros budget)**.
- **Member of the Principal Research Group, as senior researcher**, during all phases of the Research projects "System of Automated Face Recognition" and "Design of Improved Ultrasonic Transmitters with Applications in Medical Diagnosis based on non-Destructive Testing techniques", funded by the Ioannina University Research Committee, 1/10/96 - 31/12/97. **(30,000 Euros budget each)**
- **Participant, as senior researcher**, in the Research project "Pattern Recognition through Higher Order Neural Networks", funded within the framework of Hellas – Great Britain collaboration between Demokritos Technical University of Thrace, Greece, Dept. Electrical / Computer Engineering and UMIST, 1994-1996. **(20,000 Euros budget)**
- **Member of the Principal Research Group, as senior researcher**, during all phases of the EU funded Research project "Advanced MRI-MRS Techniques", within the framework of Training & Mobility of Researchers, collaborating with the Demokritos Technical University of Thrace, Greece, Dept. Electrical / Computer Engineering, 1/1/1998-31/12/2001 **(90,000 Euros budget)**.
- **Postdoctoral Senior Researcher, Technical Manager and Deputy Principal Investigator** responsible for the Analysis, Design, Implementation and the Operation of the Tele-education Center of Athens University of Economics and Business (AUEB), Dept. Business Administration, funded through EU and the Ministry of Education. The program "KETHL-AUEB: Tele-education Center of AUEB" was funded within the 1st EPEAEK framework for the period 11/98-12/99 with extension to 31/7/00 and from 1/1/01-31/8/01. **Project Objective:** To implement and establish an Internet and World Wide Web based Tele-education center suitable for Economics and Business Studies. **(250,000 Euros budget)**
- **Chief Systems Engineer in the Development and Implementation of the Military Communications System "HERMES", representing Hellenic Aerospace Industry from 10-5-2001 until 8-3-2004**, as electronic engineer, employee of Hellenic Aerospace Industry (HAI) from 10-4-00 until 8-3-04 **(50,000,000 Euros budget)**.
- **Senior researcher / Industrial Principal Investigator and Supervisor of the AMEC (Advanced Military Electronic Communications) group** for the On the Job Training (OJT) Project of a significant number of MSc theses in Communications/ embedded security systems within the framework of collaboration between Hellenic Aerospace Industry and the University of Portsmouth. The project continued without disruption from 1/1/01 until 31/12/2004. **(30,000 Euros annual budget)**
- **Principal Researcher, Chalkis Institute of Technology (CIT), Group Leader in the EU funded Marie Curie RTN project, "Advanced Signal-Processing for Ultra-Fast Magnetic Resonance Spectroscopic Imaging, and Training"**, (contract number MRTN-CT-2006-035801) **(200,000 Euros budget for CIT)** , 30-11-2006 until 30-11-2010
- **Senior Researcher, AICO Software, AICO-EDV-Beratung GmbH, Austria, supporting ERA-NET-EVA project, https://evaproject.eu/?page_id=58** , project aiming to facilitate urban and regional institutions in tackling critical challenges and steering the transition towards ECAVs, EVA aims at identifying the characteristics of innovative territorial infrastructures capable of effectively supporting these emerging technologies in road mobility, 1/11/2020-31/10/2022
- **1/6/2024- : Principal Researcher, National and Kapodistrian university of Athens (NKUA), Group Leader in the EU funded Horizon project, " GOV4LL: Governance and business models for living labs: rural regeneration hubs for tackling soil health challenges in the Mediterranean region"** **(160,000 Euros budget for NKUA)**.

Main subjects of teaching experience

- **Assoc.Professor, National and Kapodistrian University of Athens (NKUA), School of Science, Dept. General, Athens, teaching the undergraduate courses “Telecommunication Systems”, “Digital Signal Processing”, “Neural Networks and Fuzzy Logic”, “Digital Design I, & II”, “Data Acquisition Systems”, “Electronics I, & II”, (2004-) and the postgraduate course “Intelligent Systems with applications in Agricultural Engineering” in the Agricultural School of University of Thessaly, for the MSc “Automations in Agricultural Engineering and Constructions” co-organized by University of Thessaly and Automation Dept. Chalkis Institute of Technology, 2005-2009**
- **Adjunct Assoc.Professor Dr., Epoka University, Computer Engineering Department** (courses 1. Distributed Systems (MSc. Computer Engineering) 2. Distributed Systems (Bachelor Computer Engineering III), 3. Network Security (MSc. Computer Engineering), 4. Operating Systems (Bachelor Computer Engineering and Business Informatics III), 5. Integrated Systems (MSc.Electronic Engineering), 6. Control Systems (Bachelor Electronic Engineering), 7. Electronics (Bachelor Electronic Engineering), 8. Computer Organization (.Bachelor Business Informatics II).
- **Accredited Lecturer Derby University, UK, course Leader Computer Graphics**
- **Scientific Collaborator, Department of Computer Science and Engineering- European University of Cyprus, (courses in MSc. Information Systems)**
- **1/1/2011-2020: Tutor at Hellenic Fire Academy, SPHY (School of Computer Programmers in Army), STYA (Airforce Academy) and Hellenic Police Academy, and in the subjects of Informatics, Digital Systems, Electronics, Operating Systems and Networking**
- **Senior Lecturer**, Teaching senior level undergraduate courses on the Subject Section “*Computer Network Basic Issues*”, Hellenic Open University, Informatics Dept., Greece, **1/10/2002-31/7/2010**
- **Senior Lecturer**, Teaching MSc postgraduate courses on the Subject Section “*Basic Specializations on Computer Architectures and Networks*”, Open University of Cyprus, Informatics Dept., Cyprus, **2007-2008**
- **Course Leader**, Teaching undergraduate classes on the courses “*Business Applications of Informatics I*”, “*Business Applications of Informatics II*” and “*Business Simulations*”, University of Piraeus, Dept. Business Administration, Greece, **1999-2000**.
- **Course Leader**, Teaching undergraduate classes on the course “*Optimization Theory*”, University of Thessaly, Dept. Industrial Mechanical Engineering, Greece, **1999**.
- **Course Leader**, Teaching undergraduate classes on the courses “*Neural Networks*”, “*Digital Electronics*”, “*Computer Graphics*”, “*Signal Processing*”, “*Computational Intelligence*”, “*Introduction in Computer Programming*”, “*Artificial Intelligence*” and “*Compilers / Interpreters*”, University of Ioannina, Dept. Informatics, Greece as well as seminar instructor in several Informatics related seminars organized by the same Department, **1996-1998**.
- **Course Leader**, Teaching undergraduate classes on the courses “*Introduction to Computers*” and “*Biostatistics*”, Crete University, Department of Medicine, Greece, **1998**
- **Supervisor**, collaborating in the supervision of Advanced Technological Institutes (ATEI) diploma theses, Universities MSc theses/ projects and PhD candidates dissertations with ATEI Piraeus - Greece, Demokritus University of Thrace - Greece, Dept. Electrical / Computer Engineering as well as with Dept. Civil Engineering; moreover in collaboration with Crete University, Greece, Dept. of Medicine as well as with University of Patras, Mathematics Dept., Greece, Portsmouth and Bolton Universities, UK and partially with Coventry University, UK, **1996-now**.
- **Course Leader**, Teaching undergraduate classes for the course “*Intelligent Internet Commerce*” included in the Bachelor’s degree syllabus, as well as postgraduate classes for the courses “*Open Systems and Networks*”, “*Further Languages*” and “*Introduction Computing Environments*” included in the Master’s degree syllabus, IST-studies, Dept. Informatics; franchisee, since 1992, of the **University of Hertfordshire, UK** for the delivery of its programmes in Greece and accredited by the **British Accreditation Council (BAC)** as “**an institution that provides higher education**” (February 2001), **1999-2004**
- **Managing Author** of Informatics, Computing and Multimedia Curricula and detailed syllabi for the Hellenic Pedagogical Institute managed Secondary Education related- Technical Vocational Educational Schools (*TEE*) as well as for the Organization For Vocational Education And Training

(OEEK) managed Secondary Education related - Vocational Training Institutes (*IEK*), in collaboration with the respective Institute and Organization.

4. Industrial Experience

9/87-12/92: Freelance Systems Analyst/Programmer collaborating with industrial and commercial companies for the design/production of custom software covering their or their own customers special needs. In specific, among others, we mention the collaboration with the TELEMATIK Ltd. company in the development of software for medical labs applications as well as in the development of software for publishing organizations logistics applications. Moreover, we mention the collaboration with the GENERAL SUPPLY S.A. industry (TADIRAN transmitter/receiver production for the Greek Army, AC/DC distributor production for the Public Power Corporation (PPC)) in the development of custom software for production monitoring/control, logistics, etc. as well as the collaboration with the MICROTECNOLOGIA Ltd. company in LANs installations and LAN applications software development.

8/90-6/91: Co-founder of the TELEMATIK Ltd. company, managing the department of computer aided industrial measurements/automation applications through using National Instruments' PC hosted instrumentation/control line cards supported by LabView/LabWindows based custom software.

10/4/00-8/3/04: Managing senior engineer, permanent employee of Hellenic Aerospace Industry S.A., Electronics Business Unit, R&D section.

Position: Technical Manager and Chief Systems Engineer for Tactical Communication Networks and Systems.

15/2/06 -Today: External Collaborator of **Greek General Secretary of Research and Greek Informatics Society S.A.** as **Evaluator of research proposals and progress of Telematics Projects**

1/1/1999-Today: Freelance systems analyst and programmer, indexed as "Applied Sciences Researcher", in software development projects for the web and .net applications mainly, regarding telematics and databases applications, as well as in engineering education projects.

1/1/2011-Now: Project evaluator / panelist for international Research and Development Projects of Informatics and Telecommunications, including evaluation of Centers of Excellence (contracts with PriceWaterhouseCoopers Chile, authorized by INNOVA CHILE CORFO, for the installation, at Chile, of International Centres of Excellence in Informatics/ Telecommunications/Biotechnology/Natural Resources Management)

1/4/2011-30/6/2013: Scientist in charge in the subject «Introduction of Informatics in small/medium size business organizations», Institute of Small/Medium Size Business Organizations GSEBEE (IME GSEBEE), within the framework of ESPA Funding Actions «Continuing Education Programmes for the Human Resources of Small/Medium Business - Activities 7, 8, 9» of the Programme «Learning and Continuing Education»

1/11/2011-31/10/2015: Scientist in charge in the subject «Exploitation of New Technologies and Information Systems in small/medium size business organizations», **at ESEE (Hellenic Confederation of Commerce and Entrepreneurship)**, within the framework of ESPA Funding Actions «Human Resources Development» in the programme "Support of small/medium size business organizations"

5. Distinctions - Scholarships - Invitations

- **Invited Project evaluator / panelist for international Research and Development Projects of Informatics and Telecommunications, including evaluation of Centers of Excellence (contracts with PriceWaterhouseCoopers Chile, authorized by INNOVA CHILE CORFO, for the installation at Chile of International Centres of Excellence in Informatics/Telecommunications/Biotechnology/Natural Resources Management),**

17/02/2011 & 15-16/06/2011, Santiago, Chile

- Invited Researcher Scholarship in the Anticancer Research Center of Germany "Deutsche Krebsforschungszentrum (DKFZ)", Heidelberg, Germany, 1-31 July 1995, for research in Neural Networks and wavelet signal representation applications in large DNA sequencing projects.
- **BEST RESEARCH PAPER AWARD**, at the 9th Industrial Conference on Data Mining ICDM'2009 July 20 - 22, 2009, Leipzig, Germany for the paper "On Cellular Network Channels Data Mining and Decision Making through Ant Colony Optimization and Multi Agent Systems Strategies", P.M. Papazoglou, D.A. Karras, R.C. Papademetriou
- **BEST RESEARCH PAPER AWARD**, at the 2nd KES International Symposium on Agent and Multiagent Systems: Technologies and Applications, 27-28 March 2008, Incheon, Korea for the paper "On the Multi-threading Approach of Efficient Multi-Agent Methodology for Modelling Cellular Communications Bandwidth Management", by P.M. Papazoglou, D.A. Karras, R.C. Papademetriou
- Executive Steering Committee Member, Lincoln University College Malaysia (LUCM) Global Postdoctoral & Researcher Programme
<https://www.lincoln.edu.my/global-postdoctoral-researcher-programme-2/>
- Honorary Active Faculty Member Noble International University, NIU, USA,
https://niuniversity.org/?page_id=461
- Senior Member of Hong Kong Society of Algorithms and Computing Technology (HKSACT) (No: SMDK20240522001Y)

- **Keynote Speaker**, at the 2025 Seventh International Conference on New Frontiers in Engineering, Science, Law, Management, Humanities, and Social Sciences (INFES 7.0 2025), 30th and 31st January 2025, Organized by Eudoxia Research University, New Castle, USA, in association with Eudoxia Research Centre, Bangalore, India, speech title, "AI for Science and Multidisciplinary Research", <https://eudoxiaresearchuniversity.us/international-conferenceinfes/>
- **Keynote Speaker**, at the 2025 9th International Conference on Mathematical Models & Computational Techniques in Science & Engineering, 1st Artificial Intelligence Summit, Athens, Greece, January 17-19, 2025., speech title, "EMERGENT DEVELOPMENTS IN AI AND MACHINE LEARNING", <https://wseas.com/summits/2025/athens/ai/aiconference.php>, <https://wseas.com/summits/2025/athens/ai/speakers/karras.php>
- **CONVENER and Keynote Speaker**, at the 2024 NextGen Tech 2024 International Conference on Transformative Innovations in Science, Technology, Nursing and Medical Sciences (NextGen Tech 2024), 27th & 28th December 2024, organized by Eudoxia Research University, New Castle, USA, In collaboration with St. Stephen's College of Nursing, Supaul, Bihar, India, speech title, "Computational and Machine Learning methods to assist optimization of Smart Grids Management"
<https://eudoxiaresearchuniversity.us/international-conference-nextgen-tech-2024/#:~:text=What%20are%20the%20dates%20for,Video%20International%20Conference%20Participation%20Process.>
- **Keynote Speaker**, at the 2024 1st International Conference on Advanced Imaging, Detection and Signal Processing (AIDSP 2024), held on December 27-28, 2024, the Best Western Fortune Hotel in Harbin, organized by School of Electronic Engineering, Heilongjiang University, China, speech title, "New advances in medical imaging using deep learning"

models", <https://www.ic-aidsp.org/jcvqabfs>

- **Keynote Speaker**, at the 2024 IEEE 4th INTERNATIONAL CONFERENCE ON POWER ENERGY, ENVIRONMENT AND INTELLIGENT CONTROL (PEEIC-2024), (IEEE Conference Record No. 63660) held on 24th - 28th December, 2024, India, organized by Department of Electrical & Electronics Engineering, GL Bajaj Institute of Technology & Management, Greater Noida, (U.P.), India, speech title, "[Computational and Machine Learning methods to assist multi-energy systems optimization in Smart Grids Management](#)", <https://www.glbitm.org/peeic2024/keynotespeaker.html>
- **Keynote Speaker**, at the 2024 Third International Conference on Recent Advances in Social Sciences and Humanities (CASH 3.0 2024), 27th & 28th November 2024, organized by Eudoxia Research University, New Castle, USA, in Collaboration with Teachers Training College, Bhagalpur, India, speech title, "[Artificial Intelligence Advances in Education](#)"
- **Keynote Speaker**, at the 2024 China-Europe Scientists Forum & the 6th International Conference on Artificial Intelligence and Advanced Manufacturing (AIAM2024), held during October 20-21, 2024 in Frankfurt Germany, organized by Overseas Chinese Science and Technology Innovation Alliance and Chinese Association for Artificial Intelligence (CAAI), speech title, "[Opportunities and Challenges of AI and Machine Learning in Improved Healthcare: Advancements and Scenarios](#)", <http://2024.icaiam.com/speakers/>
- **Keynote Speaker**, at the 2024 International Conference on Digital Intelligence Technology and Innovative Design (DITID2024) held in Zhengzhou, China during September 27-29, 2024, organized by Research Office of Henan Institute of Technology and School of Art and Design, Henan institute of Engineering, speech title, "[Hybrid Methodology in the Design of Optimized Network Traffic Engineering Through Computational Intelligence](#)", <https://www.iaast.cn/meet/home/Bx138QI3>
- **Keynote Speaker**, at the 2024 Third International Conference on Multidisciplinary Research Trends in European, Asian and African Countries (IRTEC 3.0-2024), 27th & 28th September, 2024, organized by Eudoxia Research University, New Castle, USA, speech title, "[On AI applicability towards Sustainable Development Goals \(SDG\) Management](#)"
- **Keynote Speaker**, at the 2024 2nd International Conference on Mental Health and Behavioral Medicine (MHBM2024), held on September 13-15, 2024, Kuala Lumpur, Malaysia, organized by Medic & Public Health Association Malaysia (MPHAM), Medknow Wolter Kluwer India, International Islamic University Malaysia IIUM and Faculty of Agriculture, University Islam Sultan Sharif Ali (UNISSA), speech title, "[Advancements of Machine Learning in Healthcare: Opportunities and Challenges](#)", <http://2024.mhbm.org/Speakers/>
- **CONVENER and Keynote Speaker**, at the 2024 Sixth International Conference on New Frontiers in Engineering, Science, Law, Management, Humanities and Social Sciences INFES 6.0-2024, 30th & 31st August, 2024, organized by Eudoxia Research University, New Castle, USA In collaboration with National School of Leadership, Zambia & Sinhgad Institute of Business Administration & Research, Pune, India, speech title, "[Advances in Artificial Intelligence in Education and Learning](#)", <https://eudoxiaresearchuniversity.us/wp-content/uploads/2024/08/INFES-2024-Agenda-1.pdf>
<https://www.youtube.com/watch?v=72tr0ln3bQY>
- **Keynote Speaker**, at the 2024 3rd International Conference on Simulation Modeling, Electronic Information Science and Technology (SMEI 2024), held on August 2-4, 2024, Xiamen, China, organized by PKU-Wuhan Institute of Artificial Intelligence, China and Xidian University, China, speech title, "[Advances in Optimized Network Traffic Engineering and Design Through Machine Intelligence Techniques](#)", <https://www.icsmei.net/speaker>

- **Keynote Speaker**, at the 2024 Third International Conference on Recent Advances in Social Sciences, Humanities, Management and Scientific Research 2024 (RAMAS 3.0-2024), 23rd & 24th July, 2024, organized by Eudoxia Research University, New Castle, USA In collaboration with Sulu State College, Philippines, speech title, "AI in Social Sciences- LEADERSHIP AND INNOVATION",
- **Keynote Speaker**, at the 2024 International Conference on Machine Intelligence and Digital Applications, held on May 30-31, 2024, Ningbo, China, organized by Ningbo University of Finance & Economics and University of Haute - Alsace – France, speech title, "Recent Advances in Survivability-Aware Network Routing Engineering in Complex Large Scale Systems using computational intelligence", <http://www.icmida.org/>
- **CONVENER and Keynote Speaker**, at the 2024 Second International Conference on New Frontiers on the Global Stage of Multidisciplinary Research (ICNMR2.0) organized by Eudoxia Research University, New Castle, USA In collaboration with Bharati Vidyapeeth Deemed to be University, Pune IMRDA Sangli, Maharashtra, India, 29th May & 30th May, 2024, speech title, "Artificial Intelligence in Education" <https://eudoxiaresearchuniversity.us/wp-content/uploads/2024/05/ICNMR-Agenda-2024.pdf>
- **Keynote Speaker**, at the 2024 Third International Conference on Recent Trends in Multidisciplinary Research 2024 (ICRORM 3.0) organized by Eudoxia Research University, New Castle, USA & Eudoxia Research Centre, India, 26th and 27th April, 2024, speech title, "MULTIDISCIPLINARY RESEARCH IN AI & the WEB" https://eudoxiaresearchuniversity.us/wp-content/uploads/2024/04/Agenda-ICROM_2024.pdf
- **Keynote Speaker**, at the 2024 International Conference on Electronics, Electrical and Control System (EECS2024), held on April 12-14, 2024 in Dalian, China (Online), organized by Wuhan Institute of Technology and the International Association of Applied Science and Technology (IAAST), speech title, "Artificial Intelligence and IoT for Smart Sustainable Cities-Cybersecurity issues", <http://www.ecsconf.com/>
- **Keynote Speaker**, at the Annual International Conference 2024 on “Harmony in Innovation: Navigating Global Business Landscapes through Emerging Technologies and Dynamic Management Strategies” hosted by Dr. D. Y. Patil B-School, India in association with EMAA Business School, Morocco; The Centre of Economic Diplomacy, Croatia, Europe; Dr. Soetomo University, Indonesia; Boston International College, Nepal; Jansons School of Business, Coimbatore, India; Association of Indian Management Schools, India; and Center for Education Growth & Research, India in hybrid mode, on April 3 to April 5, 2024, "Opportunities and challenges of AI in global business and management", <https://bschool.dpu.edu.in/speaker-2024.aspx>
- **Keynote Speaker**, at the 2024 Fourth International Conference on Research Methodology for Qualitative and Quantitative Research 2024 (COM 2024), organized by Eudoxia Research University, New Castle, USA, 29th & 30th March 2024, speech title, "AI in LEADERSHIP AND INNOVATION"
- **Keynote Speaker**, at the 2024 2nd International Conference on Disruptive Technologies (ICDT-2024), March 15th - 16th, 2024, Organized by the Department of Computer Science & Engineering, GL Bajaj Institute of Technology and Management, Greater Noida, India, speech title, "Advancements, Challenges, and Risks of Artificial Intelligence in Business and management",
- **Keynote Speaker**, at the 2024 Second International Conference on Advanced Research Methods, Tools and Techniques for Multidisciplinary Research (MRD 2.0-2024), organized by Eudoxia Research University, New Castle, USA & Eudoxia Research Centre, Mumbai, India in collaboration with R. V. Institute of Management, Bangalore, 20th & 21st February 2024, speech title, "Sustainable Development Statistics, Indicators & Management, Decision"

Making"

- **Keynote Speaker**, at the 2024 Second International Conference on Multidisciplinary Research Trends in European, Asian, and African Countries (IRTEC 2.0-2024), In Collaboration with Samarpan Group, India, 18th & 19th January 2024, organized by Eudoxia Research University, New Castle, USA, speech title, "Combined Artificial Intelligence and IoT for Smart Sustainable Cities", <https://eudoxiaresearchuniversity.us/international-conference-2/>
- **Keynote Speaker**, at the 2024 INTERNATIONAL CONFERENCE ON RECENT TRENDS IN EARTH SCIENCES AND SPACE SCIENCE AND THEIR APPLICATIONS (CRPM 2024), 24-25 January, 2024, Organised by Department of Geography & IQAC, Chatra Ramai Pandit Mahavidyalaya, Kotulpur, Bankura, West Bengal), speech title, "ARTIFICIAL INTELLIGENCE: New Developments of AI & ML Applications for a Sustainable Earth and Society", <https://www.facebook.com/photo/?fbid=2615349668603813&set=a.111844825620989>
- **Keynote Speaker**, at the 2023 Fifth International Conference on New Frontiers in Engineering, Science, Law, Management, Humanities and Social Sciences (INFES 2023), 27th & 28th December, 2023, organized by Eudoxia Research University, New Castle, USA, speech title, "A CRITICAL OVERVIEW OF ADVANCES AND CHALLENGES IN ARTIFICIAL INTELLIGENCE APPLICATIONS IN URBAN PLANNING TOWARDS SMART CITIES DEVELOPMENT",
- **Keynote Speaker**, at the 2023 3rd International Conference on Technological Advancements in Computational Sciences, [1st– 3rd November 2023], IEEE sponsored, organized by Amity University Uttar Pradesh, India, Venue: Amity University, Tashkent City, Street Labzak, Building-70, 100028, Uzbekistan, speech title, "Recent advances in survivability-aware network routing engineering in complex large scale systems", https://amity.edu/ICTACS2023/pdf/ICTACS_2023_Schedule.pdf
- **Keynote Speaker**, at the 2023 FCPAE Europe Forum & 5th International Conference on Artificial Intelligence and Advanced Manufacturing (AIAM2022), organized by the Federation of Chinese Professional Associations in Europe (FCPAE), in virtual mode in October 20-21, 2023, at Brussels, Belgium, speech title, "Strategies for Applying Artificial Intelligence to deal with Climate Change", <http://www.icaiam.com/speakers/>
- **Keynote Speaker**, at the 2023 International Conference on Climate Change, Ecosystems, and Natural Resource Management for Sustainable Livelihood, organized by the Sripat Singh College and Rani Dhanya Kumari College in collaboration with the Environmental Protection Research (EPR) Journal, Universal Wiser Publisher, Singapore, in October 10-11, 2023, at Sripat Singh College and Rani Dhanya Kumari College, India, speech title, "Artificial Intelligence applications for dealing with Climate Change",
, <https://www.wiserpub.com/internationalconferenceonclima-n726.html>
<https://drive.google.com/file/d/1Gcq-1KEcOnJuDNtuWhY3ijdPCqxs75dk/view>
- **Keynote Speaker**, at the 2023 International Conference on Mental Health and Behavioral Medicine (MHBM2023), supported by Medic & Public Health Association Malaysia (MPHAM), Medknow Wolter Kluwer India, etc. in September 21-22, 2023, Malaysia, <http://www.mhbm.org/2023/> speech title, "Advancements and Applications of Artificial Intelligence in Healthcare and Medicine: Expectations, marketing buzz and real world effect", <http://www.mhbm.org/2023/Speakers/>
- **Invited Speaker**, at the First Wenchang International Smart Fishery Development Forum (FWISFDF2023) <http://www.fwisfdf.org/>, organized by the Government of Wenchang City, March 25-27, 2023 Jinshi International Hotel, Wenchang, China, speech title, "Advances on smart aquaculture research and trends",

<http://www.fwisfdf.org/>

- **Keynote Speaker**, at the 2023 6th IEEE International Conference on Information Systems and Computer Networks (ISCON 2023) organized by GLA University, Mathura, India on March 3-4, 2023, speech title, "[Two Stage AI models for Natural Language Understanding and Generative Model-Based Text-to-Speech Synthesis](#)",
<https://www.gla.ac.in/iscon2023/speaker.html>
- **Keynote Distinguished Speaker**, at the 2023 3rd International Conference on Information Technology InCITe 2023 "Theme: Decision Intelligence: Transform your World" organized by Amity University Uttar Pradesh, India on March 2-3, 2023, speech title, "[Advances on AI models for Natural Language Understanding and Generative Model-Based Text-to-Speech Synthesis](#)",
<https://amity.edu/incite2023/speakers.html>
(<https://amity.edu/incite2023/speakers.html#Dimitrios>)
- **Keynote Speaker**, at the IRTEC 2023 - International Conference on Multidisciplinary Research Trends in European, Asian and African Countries, <https://eudoxiaresearchuniversity.us/international-conference-2022/> organized by Eudoxia Research University, New Castle, USA and Eudoxia Research Centre, New Delhi, India, January 30-31, 2023 in Changsha, China, speech title, "[AI Trends and Applications towards future proofing and Society Sustainability](#)",
<https://eudoxiaresearchuniversity.us/international-conference-2022/>
- **Keynote Speaker**, at the 2022 International Conference on Electronics, Electrical and Control System (EECS 2022) <http://ww38.cespe.org/> , https://www.aconf.org/conf_187023.html organized March 3-4, 2023 in Changsha, China, speech title, "[On new Generative AI and ML model-based Text to Speech Synthesis and Natural Language Processing and Understanding](#)",
<http://ww38.cespe.org/speakes/>
- **Keynote Speaker**, at the Springer 2022 4th International Conference on Soft Computing and its Engineering Applications (icSoftComp2022), oorganized by CHARUSAT University, India, December 9-10, 2022, in hybrid mode at Charotar University of Science & Technology (CHARUSAT), Changa - 388421, Dist: Anand, Gujarat, India, speech title, "[Big Data and AI-driven Approaches for Sustainability Development Goals](#)",
<https://www.charusat.ac.in/icSoftComp2022/speakers.php>
- **Keynote Speaker**, at the 2022 International Conference on Computer Science, Information Engineering and Digital Economy (CSIEDE 2022), organized by South China University of Technology, in virtual mode in October 28-30 at Guangzhou, China, speech title, "[On Artificial Intelligence and Data Science Impact on Business and Economic Growth Resilience towards Sustainability](#)", <http://csiede.org/speaker>
- **Keynote Speaker**, at the 2022 FCPAE Europe Forum & 4th International Conference on Artificial Intelligence and Advanced Manufacturing (AIAM2022), organized by the Federation of Chinese Professional Associations in Europe (FCPAE), in virtual mode in October 7-9, 2022 at Hamburg, Germany, speech title, "[On Reliably Managing Uncertainty in Artificial Intelligence and Machine Learning Computations](#)", <http://www.icaiam.com/speakers/>
- **Keynote Speaker**, at the 2022 International Research Conference on Technology, Culture, and Society (IRConTECS 2022), organized by the Bicol State College of Applied Sciences and Technology (BISCAST), Peñafrancia Avenue, Naga City Philippines 4400, in Partnership with the International Cross-cultural Exchange and Professional Development-Thailand (ICEPD-Thailand), in virtual mode in August 25-27, 2022 at Naga City, Camarines Sur , Philippines, speech title, "[Onward Future-proofing of Society and preservation of Culture through adaptive, agile, resilient Engineering and Technology](#)"

- **Keynote Speaker**, at the 2022 7th International Conference on Mathematics and Computers in Sciences and Industry (MCSI 2022), www.mcsi-conf.org, organized by the World Scientific and Engineering Academy and Society (WSEAS) at Marathon Beach, Athens, Greece, August 22-24, 2022, speech title, "[Advances in Quantum Computing Algorithms and their applications in Robotics](#)"
- **Keynote Speaker**, at the 2022 International Research Conference on 'Fostering Resilient Business Ecosystems and Economic Growth: Towards the Next Normal' organized by Dr. D. Y. Patil B-School, India in collaboration with Dr. Soetomo University, Indonesia and Association of Indian Management Schools, India in virtual mode on April 27, 2022 to April 29, 2022, speech title, "[On Artificial Intelligence Impact on business and economic growth resilience in a sustainable world](#)", <https://bschool.dpu.edu.in/conference/speaker-2022.aspx>
- **Keynote Speaker**, at the 2022 International Conference on 'Advances in Computing and Data Sciences (ICACDS-2022)' organized by G. Pullaiah College of Engineering and Technology with Ravindra College of Engineering for Women, Kurnool, Andhra Pradesh, India on April 22-23, 2022, speech title, "[Artificial Intelligence and Robotics : current and future perspectives](#)", <https://www.icacds.com/index.php#spks>
- **Keynote Speaker**, at the INTERNATIONAL CONFERENCE ON FUTURE OF BUSINESS: OPPORTUNITIES IN A POST-PANDEMIC WORLD – 2022 (IMC-2022), organized by the Institute of Management Technology, Nagpur and Sponsored by All India Council for Technical Education (AICTE), at Nagpur, India, in April 22-23, 2022, speech title, "[Building strategic resilience during crisis periods](#)", <https://www.imtnagpur.ac.in/assets/pdf/IMC%202022.pdf>
- **Keynote Distinguished Speaker**, at the 2022 2nd International Conference on Information Technology InCITe 2022 "Theme: Computational Intelligence: Automate your World" organized by Amity University Uttar Pradesh, India on March 3-4, 2022, speech title, "[Advances on Uncertainty Management in Data Science and Machine Learning Systems Computations](#)", <https://amity.edu/incite2022/speakers.html#close>
- **Invited Speaker**, at the 2021 International Conference on Computer Vision and Pattern Analysis (ICCPA 2021), organized by AEIC (Academic Exchange Information Centre, <https://researchpeers.com/Keoconf/>), China, speech title, "[On Dealing with uncertainty in Pattern Recognition Systems](#)", <http://ic-cpa.org/speaker>
- **Invited Speaker**, at the IEEE International Conference on Computing, Networking, Telecommunications & Engineering Sciences Applications 2021, IEEE CoNTESA '21, organized by IAER (International Association for Educators and Researchers), UK and EPOKA university, Tirana, Albania, speech title, "[Advances in Multi-sensor Data Fusion for High Performance Surveillance](#)", <http://www.contesa21.theiaer.org/keynote.html>
- **Invited/Tutorial Speaker**, at the IEEE International Conference on Computing, Networking, Telecommunications & Engineering Sciences Applications 2021, IEEE CoNTESA '21, organized by IAER (International Association for Educators and Researchers), UK and EPOKA university, Tirana, Albania, speech title, "[Path and motion planning algorithms for autonomous vehicles and robots](#)", <http://www.contesa21.theiaer.org/workshop.html>
- **Invited Speaker**, at the The 6th International Conference on Fuzzy Systems and Data Mining (FSDM 2020), November 13-16, 2020, Online Conference, Beijing, China, speech title, "[Advances in fuzzy order statistics in Data mining applications](#)", <http://www.fsdmconf.org/Speaker/Details?id=160>
- **Invited Speaker**, at the IEEE International Conference on Computing, Networking,

Telecommunications & Engineering Sciences Applications 2020, IEEE CoNTESA '20, organized by IAER (International Association for Educators and Researchers), UK and EPOKA university, Tirana, Albania, speech title, "[On uncertainty management in intelligent systems computations](http://www.contesa20.theiaer.org/keynote.html)", <http://www.contesa20.theiaer.org/keynote.html>

- **Invited/Tutorial Speaker**, at the IEEE International Conference on Computing, Networking, Telecommunications & Engineering Sciences Applications 2020, IEEE CoNTESA '20, organized by IAER (International Association for Educators and Researchers), UK and EPOKA university, Tirana, Albania, speech title, "[Advances on Quantum Algorithms](http://www.contesa20.theiaer.org/workshop.html)", <http://www.contesa20.theiaer.org/workshop.html>
- **Keynote Speaker**, at the IEEE International Conference ICMIC 2018, 3rd International Conference on Measurement, Information and Control (ICMIC 2018), August 24-26, 2018, Northeast Forestry University, technical co-sponsored by IEEE Harbin Section, held in Harbin, CHINA, <http://www.icmic2018.org/ICMIC2018/ShowClass.asp?ClassID=90> talk title "[Dealing with Uncertainty in Complex Control Engineering and Intelligent Systems Computations: On the prospects of Interval Analysis in the Design of Complex Intelligent Control Systems.](http://www.icmic2018.org/ICMIC2018/ShowClass.asp?ClassID=90)"
- **Plenary Speaker**, at the 18th International Conference on SOFTWARE ENGINEERING, PARALLEL and DISTRIBUTED SYSTEMS (SEPADS '18), <http://www.wseas.org/cms.action?id=16530>, Cambridge, UK, February 16-18, 2018, talk title "[The Intelligent Systems Approach in Addressing Cyber Security and Privacy Challenges of Uncertainty](http://www.wseas.org/cms.action?id=16530)"
- **Plenary Speaker**, at the IARAS conference, International Conference on Computer Science & Communications, <https://www.iaras.org/iaras/conferences/> Athens, Greece, December 28-30, 2017, talk title "An Intelligent Systems Approach of Business Process Modelling towards a framework for integrating Analytical Management Techniques with BPM"
- **Plenary Speaker**, at the 13th International Conference on COMPUTATIONAL INTELLIGENCE, MAN-MACHINE SYSTEMS and CYBERNETICS (CIMMACS '17), <http://www.wseas.org/cms.action?id=15542>, Rome, Italy, December 15-17, 2017, talk title "[On Applying Efficient Deep Learning Methods in Control And Mobile Robotics](http://www.wseas.org/cms.action?id=15542)"
- **Tutorial Speaker**, at the International Workshop NG2CT'2017 (Next Generation Computing and Communication Technologies), <https://www.facebook.com/groups/1917593545121301/permalink/192102862811126/> Sousse, Tunisia, from 25 to 27 August 2017, talk title "[Dealing with Uncertainty in Knowledge Engineering and Intelligent Systems Computations and the prospects of Interval Analysis](https://www.facebook.com/groups/1917593545121301/permalink/192102862811126/)"
- **Plenary Speaker**, at the 17th International Conference on SIGNAL PROCESSING, COMPUTATIONAL GEOMETRY and ARTIFICIAL VISION (ISCGAV '17), <http://www.wseas.org/cms.action?id=15176>, Corfu Island, Greece, August 24-26, 2017, talk title "[New Algorithms for Computer Vision Improved Applications Based on Deep Learning Machines](http://www.wseas.org/cms.action?id=15176)"
- **Plenary Speaker**, at the INASE conference, MEROSTA 2017 (The 2017 International Conference on Mechatronics and Robotics, Structural Analysis), <http://www.inase.org/conferences/2017/crete/merosta.htm> Heraklion, Crete, Greece, July 14-17, 2017, talk title "[A Comprehensive Overview of Advances in Deep Learning Methods, Applications and Trends](http://www.inase.org/conferences/2017/crete/merosta.htm)"
- **Plenary Speaker**, at the INASE conference, ETE 2017 (The 2017 International Conference on Educational Technologies and Education), <http://www.inase.org/conferences/2017/athens/ete.htm> Athens, Greece, April 9-11, 2017, talk title "[Dealing with Uncertainty in Knowledge Representation](http://www.inase.org/conferences/2017/athens/ete.htm)"

- **Plenary Speaker**, at the 12th International Conference on APPLIED ELECTROMAGNETICS, WIRELESS and OPTICAL COMMUNICATIONS (ELECTROSCIENCE '17), <http://wseas.org/cms.action?id=14360> , Berlin, Germany, March 31-April 2, 2017, talk title “Recent Advances in Multi-Agent Simulation Systems for Scalable Wireless Sensor Networks ”
- **Plenary Speaker**, at the IEEE International Conference DevIC 2017, Kalyani Govt. Engg. Colleg., India, on 23-24 March, 2017, [IEEE Kalyani Government Engineering College](http://sites.ieee.org/sb-kgec/devic-2017/plenary-speakers/), , <http://sites.ieee.org/sb-kgec/devic-2017/plenary-speakers/> , <http://sites.ieee.org/sb-kgec/devic-2017/devic-2017-photos/> talk title “Recent Advances in Simulation Tools for Wireless Sensor Networks towards Designing Scalable and Energy Efficient Systems and Algorithms for Addressing Real World Applications based on Low Cost Distributed Hardware Implementations: A Layered Approach”
- **Plenary Speaker**, at the IEEE International Conference ICCSNT 2016, 5th International Conference on Computer Science and Network Technology, December 10-11, 2016, Changchun Normal University, Changchun, CHINA, <http://www.iccsnt.org/ICCSNT2016/ShowArticle.asp?ArticleID=393> talk title “On Load Balancing Strategies and Algorithms in the Integral Design of Survivability-supported Traffic Engineering in Multi-service QoS Networks”
- **Plenary Speaker**, at the International Conference AMCSE 2016: International Conference Applied Mathematics, Computational Science and Systems Engineering, Rome, Italy, November 5-7, 2016, talk title “Network Load Balancing Algorithms: An Overview and New Algorithms with Emphasis on Realistic NS3 Modelling of DICOM Medical Imaging Load Distribution in EHR Health Care Management”
- **Plenary Speaker**, at the 17th International Conference on NEURAL NETWORKS (NN '16), <http://www.wseas.org/wseas/cms.action?id=13473>, Rome, Italy, October 21-23, 2016, talk title “Interval Analysis Strategies and Applications in Multilayer Neural Computing”
- **Plenary Speaker**, at the INASE conference, MEROSTA 2016 (The 2016 International Conference on Mechatronics and Robotics, Structural Analysis), <http://www.inase.org/conferences/2016/corfu/merostaplenary1.htm>, Corfu, Greece, July 14-16, 2016, talk title “On Evolutionary Optimization Strategies in Efficient Traffic Engineering Design For Improving QoS in MultiService Networks”
- **Plenary Speaker**, at the 16th International Conference on NEURAL NETWORKS (NN '15), <http://www.wseas.org/cms.action?id=10054>, Rome, Italy, November 7-9, 2015, talk title “On Efficient New Schemes for Optimal Integration of Pattern Classifiers Based on Similarity Analysis of Robust Hierarchical Features”
- **Plenary Speaker**, at the World Congress DSA 2013, The Frontiers in Intelligent Data and Signal Analysis, Invited Talk World Congress DSA 2013, “Combining Pattern Classification Systems through Similarity Analysis of stable hierarchical Features”, New York, USA, July 13-25, 2013, http://www.worldcongressdsa.de/invited_talk_karras2013.html
- **Plenary Speaker**, at the 2th NAUN Int. Conf. on Circuits, Systems, Communications, Computers and Applications (CSCCA '13), <http://naun.org/cms.action?id=4316>, Dubrovnik, Croatia, June 25-27, 2013, talk title “Recent Advances in Technologies, Protocols, Implementation and Simulation Tools of Sensor Networks towards Designing Scalable and Energy Efficient Architectures and Algorithms for Addressing Coverage, Localization and Information Fusion in Real World Applications

Based on Low Cost Distributed Hardware Implementations and Open Source Simulators: A Layered Approach”,

<http://www.wseas.us/e-library/conferences/2013/Dubrovnik/TELECIRC/TELECIRC-00.pdf>

- **Plenary Speaker**, at the 1st NAUN International Conference on Optimization Techniques in Engineering (OTENG '13), <http://naun.org/cms.action?id=5620>, Antalya, Turkey, October 8-10, 2013, talk title “On New Visualization Tools, Data Mining Methods and Mathematical Techniques in the Analysis of the Weight Space of Neural Networks Solving Complex Real World Tasks for Pattern Recognition, Control and Function Approximation”, <http://www.wseas.us/e-library/conferences/2013/Antalya/OTEMA/OTEMA-00.pdf>
- **Plenary Speaker**, at the 3rd IEEE International Conference on Image Processing Theory, Tools and Applications (IPTA), Digital Object Identifier: 10.1109/IPTA.2012.6469482 Publication Year: 2012 , Page(s): 9, 15-18 Oct. 2012, Istanbul Aydin University, Turkey, talk title “A computational intelligence framework for NMR spectroscopy imaging and retrieval”, <http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6461163>
- **Plenary Speaker**, at the 12th WSEAS Int. Conf. on APPLIED INFORMATICS AND COMMUNICATIONS (AIC'12), <http://www.wseas.us/conferences/2012/istanbul/aic>, Istanbul, Turkey, August 21-23, 2012, talk title “On Improved Modeling of Survivability-supported Traffic Engineering in Multi-service Networks”, <http://www.wseas.us/conferences/2012/istanbul/aic/>
- **Plenary Speaker**, at the IEEE International Conference on Measurement, Information and Control (MIC), 2012; Harbin; China; 18 May 2012 through 20 May 2012, talk title “On Improved Computational Intelligence Schemes and Multi Agent Systems Techniques for Large Scale Cellular Network Resource Management”, <http://202.118.192.149/hrb-lgdx-en/News%20Events/News/14846.htm>
- **Plenary Speaker**, at the IEEE International Conference on Computer Science and Network Technology, ICCSNT 2011; Harbin; China; 24 December 2011 through 26 December 2011, talk title “On Integrating Computational Intelligence Schemes in a Multi Agent Systems Framework to improve Large Scale Cellular Network Resource Management”, <http://www.iccsnt.org/files/Plenaryspeeches.pdf>
- **Plenary Speaker**, at the 2nd International conference of the Institute for Environment, Engineering, Economics and Applied Mathematics: APPLIED INFORMATICS and COMPUTING THEORY (AICT), Prague, Czech Republic, September 26-28, 2011, talk title “On Computational Techniques based on Nonlinear and Fuzzy Systems Theory for NMR Spectroscopy Data Mining”, <http://dl.acm.org/citation.cfm?id=2047895.2047897&coll=DL&dl=GUIDE&CFID=314666492&CFTOKEN=10930859>
- **Plenary Speaker**, at WSEAS MAMECTIS 2008 (MATHEMATICAL METHODS, COMPUTATIONAL TECHNIQUES and INTELLIGENT SYSTEMS) conference, 26 October 2008, Corfu Greece, talk title “Global Optimization Strategies for Improved Bandwidth Management in Wireless Communications”, <http://dl.acm.org/citation.cfm?id=1562338&CFID=314666492&CFTOKEN=10930859>
- **Invited Speaker** in the NATO-ASI “Advanced Signal Processing for Multimedia”, Il Ciocco, Italy, July 1998, talk title “On Applying Fast And Efficient Methods in Pattern Recognition”.
- **Invited Speaker** in the Anticancer Research Center of Germany "Deutsche Krebsforschungszentrum (DKFZ)", Heidelberg, Germany, March 1995, talk title "Novel Neural Network Training Algorithms".
- **Invited Speaker** in the International Conference "NEURONET 93", September 1993, Prague,

- Czech Republic, talk title "A family of efficient learning algorithms"
- **Scholarship for participation** in the NATO-ASI "From Statistics to Neural Networks", Les Arcs, France, July 1993.
- **Scholarship for participation** in the NATO-ASI "Parallel Computing and Multiprocessor systems", Bilkent University, Ankara, Turkey, July 1991.
- **Postgraduate research scholarship**, based on exams, awarded from the Institute of Informatics and Telecommunications, National Center for Scientific Research (NCSR) DEMOKRITOS, 1988.
- **State Scholarship Foundation (IKY) scholarship** (1978), awarded for successful first year studies as well as for being 8th among those succeeded in the National Level Examinations (1977) being admitted as students in the National Technical University of Athens (NTUA), Dept. Electrical & Computer Engineering.
- **Greek Mathematical Society 3rd Prize**, National Student Competition of the Greek Mathematical Society, 1976.
- **Curriculum Vitae selection** for being included in the "Who is Who in the World", Marquis publications, 1996-1998 editions.
- **Member of International Organizations and Institutes**, such as IEEE, ACM, New York Academy of Sciences, INNS, etc.

5a. International Distinctions – Editorships – Conferences Organization - Refereeing for International journals / Conferences.

- **Editor in Chief (2023-)** "International Journal of Innovative Technology and Interdisciplinary Sciences (IJITIS)", ISSN: 2613-7305, Publisher: Association of Talent under Liberty in Technology (TULTECH), Registrikood: 80569671, <https://journals.tultech.eu/index.php/ijitis/Indexing>, <https://journals.tultech.eu/index.php/ijitis/about/editorialTeam>, Address: Sopruuse pst, Tallinn, Estonia 10615
- **Editor in Chief (new journal, 2022-)** "International Journal of Applied Mathematics, Computational Science and Systems Engineering", <https://www.wseas.com/journals/amcse/index.php>, E-ISSN: 2766-9823, World Scientific and Engineering Academy and Society (WSEAS), Greece
- **Editor in Chief (2008-3/2016)** "International Journal of Signal and Imaging Systems Engineering (IJSISE)", InderScience Publishers, UK & Switzerland <http://www.inderscience.com/browse/index.php?journalCODE=ijsise>, **SJR (2010): 0.026 & SNIP (2010): 0.263**

- **Editorial Board Member: Journal Engineering Applications of Artificial Intelligence, Elsevier, (2022-ongoing), <https://www.journals.elsevier.com/engineering-applications-of-artificial-intelligence/editorial-board/prof-dr-dimitrios-karras-phd>, <https://www.journals.elsevier.com/engineering-applications-of-artificial-intelligence/editorial-board>**
- **Editorial Board Member: Journal CAAI Transactions on Intelligence Technology, IET Digital Library (2019-ongoing), <https://digital-library.theiet.org/journals/trit/editors>**
- **Editorial Board Member: Journal Applied Computational Intelligence and Soft Computing, Hindawi Limited, ISSN 16879724, 16879732 (2021-ongoing), <https://www.hindawi.com/journals/acisc/editors/>**
- **Editorial Board Member: Journal of Computer Science, Science Publications, ISSN: 1549-3636 (Print), ISSN: 1552-6607 (Online), (2024-ongoing), <https://thescipub.com/jcs/editors>**
- **Editorial Board Member: Journal Academia Engineering, Academia.edu (https://www.academia.edu/journals/3/academia_engineering/about/editorial_board)**
- **Section Editor on Intelligent Systems, journal Recent Patents on Engineering, Bentham publishers, 2023-ongoing <https://www.eurekaselect.com/journal/78/editorial-board>**
- **Editorial Board Member: Open Access Journals (IJANA) (2020-ongoing), <https://www.ijana.in/Editorial%20process.php>**
- **Academic Editor, Editorial Board: Communications, The Scientific World Journal, Hindawi publishers (2010-2016), <http://www.hindawi.com/journals/tswj/editors/communications/>**
- **Academic Editor, Editorial Board, The Journal of Applied Mathematics, Hindawi publishers (2010-2019), <http://www.hindawi.com/journals/jam/editors/>**
- **Editor in the Editorial Board of the journal, ISRN Computer Engineering, Hindawi publishers (2010-2019), <https://www.hindawi.com/journals/isrn/editors/computer.engineering/>**
- **Editor (2008-2011) in the Editorial Board of the journal, Bentham Publishers, The Open Information Science Journal, ISSN: 1874-947X, <http://www.bentham.org/open/toiscij/EBM.htm>**

- **Publication Chair, at the 2025 5th International Conference on Computer Network Security and Software Engineering (CNSSE 2025), February 21-23, 2025 in Qingdao, China <https://www.cnsse.org/Committee>**
- **Program Chair, at the 2025 5th International Conference on Bioinformatics and Intelligent Computing (BIC 2025), January 12-14, 2025 in Shenyang, China, <https://www.ic-bic.net/Committee>**

- **Publicity Chair**, at the 10th International Conference on Informatics and Business Engineering (ICIBE 2024), Bangkok, Thailand, December 20-22, 2024. <https://www.icibe.org/committee.html>
- **Program Chair**, at the 3rd International Conference on Artificial Intelligence and Software Engineering (ICAISE 2024), Singapore, October 25-27, 2024 <https://icaise.org/committee.html>
- **Program Chair**, at the 2024 Aisa Conference on Trends in Image Processing (ATIP 2024), London, UK, October 13-15, 2024 <https://www.atip.net/committees.html>
- **Convener at the INFES 6.0- 2024 Sixth International Conference on New Frontiers in Engineering, Science, Law, Management, Humanities and Social Sciences INFES 6.0-2024, Organized By Eudoxia Research University, New Castle, USA, Eudoxia Research Centre, Mumbai, Bangalore and Guwahati, India, 30-31/8/2024,** <https://eudoxiaresearchuniversity.us/international-conference-infes/>
<https://eprints.ugd.edu.mk/34589/2/INFES%202024%20Agenda%20%281%29.pdf>
- **Publication Chair**, at the 2024 3rd International Conference on Signal Processing and Communication Security (ICSPCS 2024), June 7-9, 2024, Chengdu, China <https://www.icspcs.net/wtokpwhs>
- **Convener at the Second International Conference ICNMR 2.0-2024, Second International Conference on New Frontiers on the Global Stage of Multidisciplinary Research, Organized By Eudoxia Research University, New Castle, USA, Eudoxia Research Centre, Mumbai, Bangalore and Guwahati, India, 29-30/5/2024,** <https://eudoxiaresearchuniversity.us/international-conference-2024/>
- **General Co-Chair in the First IndusFour Conference: Computers, Information Technology, Data and Sustainability 2024, March 30 & 31, 2024 | Online | Worldwide,** <https://www.vectmag.com/indusfour-24>
- **Technical Chair**, International Symposium on Internet of Things and Smart Cities June 21~23, 2024, <http://www.isitsc.org/>
- **General Chair in the 3rd International Conference on Management Science and Software Engineering (ICMSSE 2023),** <http://www.icmsse.org/committeeSpeaker>
- **General Chair in the First International Conference on Sustainable Societies, Science and Technology (ICSST 2023),** <https://www.vectmag.com/icsst2023>
- **Organizing & Publishing Committee chair** in the International Analytics Conference 2023 IAC 2023 February 2& 3, 2023 | Virtual Conference, <https://www.vectmag.com/iac2022>
- **Technical Chair**, International Conference on Demystifying Emerging Trends in Green Technology ICDETGT-2023,
- **Publication Chair**, 2023 3rd International Conference on Artificial Intelligence, Robotics, and Communication (ICAIRC 2023) and IMSE2023: 2023 International Conference on Intelligent Management and Software Engineering, IEEE IST 2023 <https://ist2023.ieee-ims.org/conference-organizers>
- **General Chair** in the INTERNATIONAL CONFERENCE ON INTELLIGENCE-based TRANSFORMATIONS OF TECHNOLOGY AND BUSINESS (ICITTB) 2022 (Shaping the Future: Digital Economy and Recent Technology Trends), organized by Canadian Institute of Technology (CIT), Tirana, Albania, October 13-14 2022, <https://www.cit.edu.al/conference>

- **Program Chair** in the International Conference On Intelligent Computing And Next Generation Networks (ICNGN2022), <https://www.icngn.org/pages/committee.html>
- **General Co-Chair** IEEE International Workshop on Imaging Systems and Techniques (IST 2009), Shenzhen, China, 11-12 May 2009 & IEEE International Workshop on Imaging Systems and Techniques (IST 2010), Thessaloniki, Greece, 1-3 July 2010 & IEEE International Workshop on Imaging Systems and Techniques (IST 2011), Batu Ferringhi, Penang, Malaysia, 17-18 May 2011, Manchester UK 2012, 16-17 July 2012. Beijing China, 2013, Santorini, Greece, 2014
- **Programm Chair and Special session organizer** in IWSSIP 2005, September 2005, Chalkis
- **Programm Chair and Special session organizer** in IWSSIP 2009, June 2009, Chalkis
- **General Chair** in the Conference on Artificial Intelligence and Pattern Recognition, AIPR-07, Orlando, Florida, USA, July 9-12, 2007, in the International Conference on Software Engineering Theory and Practice, SETP-07, Orlando, Florida, USA, July 9-12 2007 as well as in the International conference on Automation, Robotics and Control Systems, ARCS-08, Orlando, Florida, USA, July 7-10 2008 and ARCS-2009& ARCS-2010, Orlando, Florida, USA, July 2009/2010.
- **Invited Researcher at the AntiCancer Research Center of Germany "DKFZ", Heidelberg, 1-31 July 1995**, for research in Neural Networks applications and wavelet signal representation in large DNA sequencing projects.
- **International Programm Committee Member**
 - MLDM-2007 up to MLDM-2016, NABIC 2011
 - The IASTED International Conferences on Biomedical Engineering BioMED 2003 up to BIOMED 2011, Salzburg, Austria
 - SCI-2002 - SCI-2010 (Conferences on SYSTEMICS, CYBERNETICS and INFORMATICS)
 - SETN-2006-2008-2010, NUM-2007 etc.
- **Session chair BMSD 2017, Barcelona, Spain, 4-6 July 2017**
- **Session chair IST 2010, IEEE, Thessaloniki, Greece, 1-3 July 2010**
- **Session chair IWSSIP 2009, IEEE, Chalkida, Greece, June 2009**
- **Session chair IST 2008, IEEE, Chania, Greece, 10-12 Sept. 2008**
- **Session chair HAIS 2008, 3rd International Workshop on Hybrid Artificial Intelligence Systems, Burgos, Spain, Session W1.2 (@Room B02) Connectionist Models I, 24-26 Sept. 2008**
- **Session chair WISP 2007, IEEE, Alcalá de Henares (Madrid) Spain, October, 3-5, 2007**
- **Session chair IST 2006, IEEE, Minory, Italy, April 2006**
- **Session chair ICANN 2005, Warsaw, Poland, September 2005**
- **Session chair (14:00 – SESSION 9 – COMMUNICATION AND NETWORKS II – Algorithms and Models, 5/11/02) at conference «The IASTED International Conference on Applied Modelling and Simulation (AMS-2002)», November 4-6, 2002, Cambridge, USA.**
- **Session chair (08:30 – SESSION 6 – COMPUTER AND INFORMATION SYSTEMS I – Information Systems and Processing, 5/11/02) at conference «The IASTED International Conference on Applied Modelling and Simulation (AMS-2002)», November 4-6, 2002, Cambridge, USA.**
- **Session organizer and chair (Communications and Security, 11/7/01) at conference CSCC 2001 (WSES), Rethymno, Crete, Greece, 9/7/01-12/7/01.**
- **Session organizer and chair (Neural Network Applications, 27/10/98) at conference CSC'98 (IMACS), Piraeus, Greece, 26/10/98-28/10/1998.**

- **Session chair (Pattern and image analysis, 13--15/3/1997) at workshop ASPM-MRI-97, Xanthi, Greece 13-15/3/1997.**
- **Session chair (Applications 6, 28th November 1995) at the IEEE conference ICNN'95 (IEEE Conference on Neural Networks), Perth, Australia 27 /11/ 1995- 1 /12/ 1995.**
- **Reviewer at refereed journals: AMS (American Mathematical Society) Reviews, Journal of Intelligent Systems (Brunel University, UK), Journal of Franklin Institute (USA), journal of Intelligent & Fuzzy Systems (USA), Pattern Recognition Letters journal, IEEE Trans. Circuit & Systems journal, IEEE Trans. Neural Networks, IEEE trans. SMC, IEEE Trans. Measurement and Instrumentation, GVIP journal, ELSEVIER journals (EAAI, Neurocomputing, European Journal of Operational Research, INS etc.), Artificial Intelligence in Medicine (AIIM) journal and**
- **Reviewer at refereed international conferences (IWSIP96, IWSSIP 2005-2010, EPY 2001-, SETN-02—SETN-06—SETN-08, ECC-2003, SCI-2003, SCI-2004-2011, IASTED/BIOMED-2003/2004/2005/2006/2007/2008-2011, IEEE IST 2006-2014 conferences etc., MLDM conferences, ICINCO 2008-2017, etc.).**

6. Research Areas of Interest

My Research activities focus on the Design and Simulation of Intelligent/Adaptive Systems applied in Data Science, with emphasis on Machine/Deep Learning and Neural Network Algorithms as well as on Computational/Artificial Intelligence Algorithms/Digital-Systems. Moreover, span Pattern Recognition, Decision Support, Learning and Parallel & Distributed Systems. My research efforts involve tools/techniques and applications from/in the following scientific fields:

- **Machine and Deep Learning, Optimization, Pattern Recognition, Data Science and Intelligent Systems (including Computational and Artificial Intelligence as well as Multi-Agent Systems) and Decision Support Systems/ Biomedical Systems as well as Telecommunication Systems with emphasis in Wireless Communication Systems and Wireless Sensor Networks**
- **Complex Systems, Distributed Systems, Fault Tolerance, Sustainability**
- **Digital Signal and Image Processing, Digital systems and computer architectures, Quantum computing and algorithms**
- **Security of Computer and Communication Systems, Electronic Commerce, Management Information Systems, and Web based Learning.**
- **Computer Vision and Robotics.**
- **Systems Control and Identification, Dynamical Systems, Nonlinear Systems, Time Series forecasting, Predictive Analytics.**
- **Qualitative and Quantitative Systems/ Data & Big Data Analytics, Fast Algorithms**

With regards to the mathematical tools supporting my research efforts these are coming from Optimization Theory and Signal Representation/Transformation methodologies.

Moreover, my research activities include involvement in the simulation phase of implementing the proposed algorithms in electronic hardware (SPICE simulation of analog Neural Networks, VHDL & FPGA prototyping implementation of Intelligent/ Signal-Image processing/ Security-Cryptography systems) and development of embedded applications (within the framework of collaboration between Hellenic Aerospace Industry and the University of Portsmouth in the years 2000-2004).

My main research efforts concentrate in the area of design and implementation of efficient Algorithms, concerning Neural Networks – Computational/Artificial Intelligence – Pattern Recognition/ Decision Support and Intelligent Systems using Optimization theory and Nonlinear techniques as well as digital signal representation / processing/ transformation techniques, with emphasis on the wavelet transform methods, and on applying the designed algorithms in the above defined scientific /application fields and especially in communication systems and computational biomedicine systems. One of the most important parts of my research is related to the investigation, design and development of improved architectures for Parallel & Distributed Computational/ Artificial Intelligence based Intelligent Systems by introducing optimal complexity to enhance their Learning/Generalization and Performance

capabilities with applications in the design of efficient Pattern Recognition, Computational Biomedicine, Decision Support, Image Analysis, Communications and Secure Computing/Communication Systems as well as in the design of efficient Modelling/Forecasting, Identification/Control and Management of real world Systems.

This research has already produced, as illustrated in the list of my publications, more than 327 in total research papers/books (103 in international refereed journals – 21 edited books, 14 research papers as book chapters in international publishers' books, 189 in international refereed conferences and, finally, more than 15 technical reports and research & development projects deliverables. Citations of my research works from other researchers (10/02/2025)-excluding self-citations- appear in more than 3584//2303/2120 (Google Scholar//Semantic Scholar/Lens) and 2633 (ResearchGate Index citations, with more than 25504 ResearchGate Index Reads metric) research papers, as well as in more than 1832//1187 research papers in Scopus//Web of Science peer-reviewed research databases, with H/G indexes 27/73 (Google Scholar), Scopus-H index 17 and RG-Research Interest score 1406 (in the top 5% of the ResearchGate index members database).

My already published research refers to three categories of Developed and Applied Algorithms:

- (a) Design, Implementation and Applications of Neural Networks – Computational/Artificial Intelligence Systems – Pattern Recognition & Data Science , Decision Support and Intelligent Systems in Digital Signal/Image processing, Pattern recognition, Computational Biomedicine & qualitative/ quantitative systems/data analysis, Communications, Computing/Communications Security, Optimization, Modelling & Forecasting (medical, financial) & Control as well as in Secure Management Systems with emphasis in e-commerce/ e-learning and
- (b) Development, Implementation and Applications of Stochastic Signal Processing algorithms with emphasis in the wavelet transformation algorithms for designing and modelling the above mentioned systems.
- (c) Scheduling algorithms for wireless communication systems and multiagent systems

7. List of Publications

7.1 Dissertations

[D.1] Diploma thesis entitled “**Study on operation time out in multiple microway links using suitable attenuation data**” for fulfilling the obligations to obtain the MSc in Electrical Engineering, February 1985, NTUA, Department of Electrical and Computer Engineering, Greece, Degree with honors (9.0). Supervisor: J. Kanellopoulos (NTUA Prof.)

[D.2]. PhD Dissertation entitled, “**Optimization and Artificial Neural Networks: Efficient ways in introducing apriori knowledge in the learning process**”, January 1995, NTUA, Department of Electrical and Computer Engineering, Greece, Degree with honors (10.0). Supervisor: G. Karayannis (NTUA Prof.)

7.2. Refereed International Journals

[J.1] G.E.Antoniou, G.O.A.Glentis, S.J.Varoufakis, and D.A.Karras, “**Transfer Function Determination of Singular Systems Using the DFT**”, IEEE Trans. on Circuits and Systems, Vol.36, No.8, Aug.1989, pp 1140-1142, ISSN: 1549-8328, **SJR** (2009): 0.114 , **SNIP** (2009): 2.500, 1989.

[J.2] D.A.Karras, S.J.Varoufakis and G.B. Carayannis "**A Neural Network for character recognition using a preprocessing gaussian pyramid encoding block**", journal Neural Network World, Vol. 2, Number 3-4, 1992, pp. 347-352, Publisher: Czech Academy of Sciences ISSN: 1210-0552, Scopus Coverage Years: from 1994 to Present , **SJR** (2009): 0.039 , **SNIP** (2009): 0.650, 1992.

[J.3] D.A.Karras, S.J Varoufakis, "**Neural Network for estimation of parameters of sinewave**", Electronics Letters IEE, 27th August 1992, Vol. 28, No. 18, pp. 1750-1751, Publisher: Institute of Electrical Engineers, ISSN: 0013-5194 E-ISSN: 1350-911X Scopus Coverage Years: from 1969 to Present, **SJR** (2009): 0.095, **SNIP** (2009): 1.440, 1992

[J.4] D.A.Karras, S.J.Varoufakis, G.E. Antoniou and G.B, Carayannis "**Hopfield-Tank Neural Net: Walsh to Fourier Transform**", Neurocomputing, ELSEVIER, Vol. 4, Numbers 1-2, February 1992, pp. 37-41, ISSN: 0925-2312 Scopus Coverage Years: from 1989 to Present, **SJR** (2009): 0.074, **SNIP** (2009): 1.740, 1992

[J.5] S. J. Perantonis and D. A. Karras (1995). "**An efficient constrained learning algorithm with momentum acceleration**", Neural Networks, Elsevier, Vol. 8-2, 1995 pp. 237-249, ISSN: 0893-6080 Scopus Coverage Years: from 1988 to Present, **SJR** (2009): 0.166, **SNIP** (2009): 2.040, 1995

[J.6] D. A. Karras and S. J. Perantonis (1995), "**An Efficient constrained training algorithm for feedforward networks**", IEEE Transactions on Neural Networks, November 1995, Vol. 6, No. 6, pp. 1420-1432, ISSN: 1045-9227 Scopus Coverage Years: from 1990 to Present, **SJR** (2009): 0.116 , **SNIP** (2009): 5.350, 1995

[J.7] E.J Hatzakis, D.A. Karras, P. Tziannos and N. Paritsis. "**Supervised and Unsupervised Neural and Statistical Methods in Psychiatric Case Categorization**", Neural Network World journal, ICS AS CR 1997, No 2, pp. 161-175, 1997, Publisher: Czech Academy of Sciences ISSN: 1210-0552, Scopus Coverage Years: from 1994 to Present , **SJR** (2009): 0.039 , **SNIP** (2009): 0.650, 1997.

[J.8] M. Reczko, D.A. Karras and H. Bohr. "**An update of the DEF Data-Base of Protein Fold Class Predictions**", Nucleic Acids Research journal, Vol. 25, No 1, pp. 235, 1997.

[J.9] D.A. Karras, S.A. Karkanis and B.G. Mertzios, "**Information Systems based on Neural Network and Wavelet Methods with application to decision making, modelling and prediction tasks**", journal KYBERNETES-The International journal of Systems and Cybernetics, Vol. 27, No 3, pp. 224-236, 1998, Publisher: Emerald Group Publishing Ltd. ISSN: 0368-492X Scopus Coverage Years: from 1976 to 1988, from 1995 to Present, **SJR** (2009): 0.035 , **SNIP** (2009): 0.460, 1998

[J.10] D.A. Karras, "**A multiclassifier approach in defect segmentation based on the wavelet transform**", Neural Network World journal, ICS AS CR 1998, No 1, pp. 99-113, 1998, Publisher: Czech Academy of Sciences ISSN: 1210-0552, Scopus Coverage Years: from 1994 to Present , **SJR** (2009): 0.039 , **SNIP** (2009): 0.650, 1998.

[J.11] D.A. Karras, S.A. Karkanis and B.G. Mertzios, "**Supervised and Unsupervised Neural Network Methods applied to Textile Quality Control based on Improved Wavelet Feature Extraction Techniques**", journal International J. Computer Mathematics, Vol. 67, pp. 169-181, 1998, Publisher: Taylor & Francis ISSN: 0020-7160 Scopus Coverage Years: from 1971 to 1972, from 1974 to 1977, from 1979 to 1984, 1988, from 1992 to Present, **SJR** (2009): 0.042 , **SNIP** (2009): 0.560, 1998

[J.12] A. Likas, D.A. Karras and I.E. Lagaris, "**Neural Network Training and Simulation Using a Multidimensional Optimization System**", journal International J. Computer Mathematics, Vol. 67, pp. 33-46, 1998, Publisher: Taylor & Francis ISSN: 0020-7160 Scopus Coverage Years: from 1971 to 1972, from 1974 to 1977, from 1979 to 1984, 1988, from 1992 to Present, **SJR** (2009): 0.042 , **SNIP** (2009): 0.560, 1998

[J.13] S.A Karkanis, D.A. Karras and B.G. Mertzios, "**A Novel Signal Modeling Method Using the Wavelet Transform**", journal Neural, Parallel and Scientific Computations, Vol. 6, No 3, pp. 417-428, 1998, DOI:10.5281/zenodo.13836825 .

[J.14] V. Zorkadis and D.A. Karras, "**Feedforward Neural Networks for (Pseudo)Random Number Generation and Evaluation**", Neural Network World journal ICS AS CR 1998, Vol. 8, No 6, pp. 639-651, 1998, Publisher: Czech Academy of Sciences ISSN: 1210-0552, Scopus Coverage Years: from 1994 to Present , **SJR** (2009): 0.039 , **SNIP** (2009): 0.650, 1998

[J.15] D.A. Karras and V. Zorkadis, "**On Applying Multilayer Perceptron Learning Properties to (Pseudo)Random Number Generation and Evaluation**", Neural, Parallel and Scientific Computations

journal, Vol. 6, No 4, pp. 513-521, December 1998.

[J.16] I. G. Vlachonikolis, D.A. Karras, E.J Hatzakis, and N. Paritsis, "**Improved Statistical Classification Methods in Computerized Psychiatric Diagnosis**", Journal Medical Decision Making, Vol. 20, Issue 1, pp. 95-103, January-March 2000, Publisher: Sage Science Press, ISSN: 0272-989X E-ISSN: 1552-681X Scopus Coverage Years: from 1981 to Present, **SJR** (2009): 0.262 , **SNIP** (2009): 1.640, 2000

[J.17] M. Reczko, D.A. Karras, B.G. Mertzios, D. Graveron-Demilly, D. van Ormondt, "**Improved MR image reconstruction from sparsely sampled scans based on neural networks**", journal pattern recognition letters, Vol.22, Number 1, pp. 35-46, January 2001, ISSN: 0167-8655 Scopus Coverage Years: from 1982 to Present, **SJR** (2009): 0.103, **SNIP** (2009): 3.120, 2001

[J.18] Y.S. Boutalis, D. A. Karras and B.G. Mertzios, "**Regularized Supervised and Unsupervised Neural Network Models for Function Approximation in Intelligent Robot Dynamic Control**", Buletinul Universitatii "Petrol-Gaze" Ploesti, Vol. LII, Seria Technica, Nr. 1/2000, pp. 99-104

[J.19] D E Maroulis, D K Iakovidis, S. A. Karkanis, D.A Karras, "**CoID: A versatile detection system for colorectal leasions in endoscopy video-frames**", Computer Methods and Programs in Biomedicine Vol. 70 (2), 2003, Elsevier, pp. 151-166, ISSN: 0169-2607 Scopus Coverage Years: from 1985 to Present, **SJR** (2009): 0.119, **SNIP** (2009): 1.080, 2003

[J.20] S.A. Karkanis, D.K. Iakovidis, D.E. Maroulis, D.A. Karras and M. Tzivras, " **Computer Aided Tumor Detection in Endoscopic Video using Color Wavelet Features** ", IEEE Trans. Information Technology in Biomedicine, Vol. 7, Issue: 3, Sept. 2003, pp.141 – 152, ISSN: 1089-7771 Scopus Coverage Years: from 1997 to Present, **SJR** (2009): 0.100 , **SNIP** (2009): 1.940, 2003

[J.21] D.A. Karras and V. Zorkadis, "**On Neural Network Techniques in the Secure Management of Communication Systems through Improving and Quality Assessing Pseudorandom Stream Generators**", Neural Networks, Elsevier, Vol. 16, issues 5-6, (2003), pp. 899-905, ISSN: 0893-6080 Scopus Coverage Years: from 1988 to Present, **SJR** (2009): 0.166, **SNIP** (2009): 2.040, 2003

[J.22] V. Zorkadis, D.A. Karras, "**Privacy-Enhancing Digital Rights Management Systems**", WSEAS Transactions on Communications, Vol.2, Issues 2&3, pp. 160-165, 2003, ISSN 1109-2742, Publisher: World Scientific and Engineering Academy and Society (WSEAS) Press, ISSN: 1109-2742 Scopus Coverage Years: from 2005 to Present, **SJR** (2009): 0.037, **SNIP** (2009): 0.520, 2003

[J.23] Magoulas G.D., Karkanis S.A., Karras D.A. and Vrahatis M.N., "**Evaluation of texture-based schemes in neural classifiers training**", WSEAS Transactions on Computers, Vol. 3, No. 6, December 2004, pp.1729-1735, DOI: 10.5281/zenodo.13836918

[J.24] D.A. Karras and B.G. Mertzios, "**Time series modeling of endocardial border motion in ultrasonic images comparing support vector machines, multilayer perceptrons and linear estimation techniques**", Measurement: Journal of the International Measurement Confederation, Elsevier, Vol. 36, Issues 3-4, (October-December 2004), pp.331-345, 2004, ISSN: 0263-2241 Scopus Coverage Years: from 1983 to Present, **SJR** (2009): 0.046 , **SNIP** (2009): 1.000, 2004

[J.25] D.A Karras "**A Second Order Spread Spectrum Modulation Scheme for Wavelet Based Low Error Probability Digital Image Watermarking**", ICGST International Journal on Graphics, Vision and Image Processing (GVIP) , issue 3, vol. 5, 2005, (ISSN: 1687-398X Print, ISSN: 1687-3998 Online and ISSN: 1687-4005 CD-ROM), DOI:10.5281/zenodo.13829134

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Dimitrios Alexios Karras

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Engineering & Technology / Electrical & Information Engineering

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	SCORES	RANKINGS			
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H Index (Total)	26	#681	#2,769	#114,757	#315,445
H Index (Last 6 Years)	18	#660	#2,790	#126,671	#377
H Index Last 6 years / Total Ratio	69%				
i10 Index (Total)	71	#452	#1,631	#67,472	#777
i10 Index (Last 6 Years)	26	#737	#3,152	#124,868	#777
i10 Index Last 6 years / Total Ratio	36%				
Citation (Total)	3,414	#570	#2,248	#121,198	#777
Citation (Last 6 Years)	1,297	#667	#2,770	#121,868	#777
Citation Last 6 years / Total Ratio	37%				
Engineering & Technology *		#56 (225) *	#723 (3,142) *	#777 (109,335) *	#777 (421,278) *
Electrical & Information Engineering * Intelligent Systems Machine Learning Wireless Communications Signal and Image Processing Multigent Systems		#5 (32) *	#11 (96) *	#777 (1,593) *	#777 (7,567) *