

Professor George A. Tsihrintzis

GEORGE A. TSIHRINTZIS received the Diploma of Electrical Engineer from the National Technical University of Athens, Greece (with honors) and the M.Sc. and Ph.D. degrees in Electrical Engineering from Northeastern University, Boston, Massachusetts, USA. He is currently a Professor in The University of Piraeus, Greece and Head of its Department of Informatics. From 2008 to 2016, he also served as the Director of the Graduate Program of Study in “Advanced Computing and Informatics Systems” of the Department. His current research interests include Knowledge-based/Intelligent Software Engineering, Software Personalization, Information Retrieval from Databases, Artificial Intelligence, Machine Learning, Pattern Recognition, Decision Theory, and Statistical Signal Processing and their applications in Multimedia Interactive Services, User Modeling, Knowledge-based Software Systems, Human-Computer Interaction and Information Retrieval. He has authored or co-authored over 300 research publications in these areas, which have appeared in international journals, book chapters, and conference proceedings, and has served as the principal investigator or co-investigator in several R&D projects. He has supervised 10 doctoral students who have received their doctoral degrees and is currently supervising an additional 5 students.

Conference chairing (30+)

He was the founding general and program co-chair of the **2008 International Symposium on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS 2008)**, Piraeus, Greece, July 9-11, 2008, organized jointly by the Department of Informatics of the University of Piraeus and KES International. He was the local organizing co-chair of the **8th Joint Conference on Knowledge-Based Software Engineering (JCKBSE 2008)**, Piraeus, Greece, August 25-28, 2008. He was the honorary co-chair of the **2009 International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS 2009)**, Venice, Italy, July 16-17, 2009. He was the general and program co-chair of the **2010 International Joint Conference on e-Business and Telecommunications (ICETE 2010)**, Piraeus, Greece, July 26-28, 2010. He was the founding general co-chair of the **2010 International Multi-Conference on Innovative Developments in Information Communication Technologies (INNOV 2010)**, Piraeus, Greece, July 29-31, 2010. He was the general and program co-chair of the **2010 International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS 2010)**, Baltimore, USA, July 28-30, 2010. He was the program co-chair of the **2011 International Conference on Signal Processing and Multimedia Applications (SIGMAP 2011)**, Seville, Spain, July 18-21, 2011. He was the general and program co-chair of the **2011 International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS 2011)**, Piraeus, Greece, July 20-22, 2011 and the local organizing co-chair of the **2011 International Conference on Intelligent Decision Technologies (KES-IDT-2011)**, Piraeus, Greece, July 20-22, 2011. He was the honorary chair of the **2012 International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS 2012)**, Gifu, Japan, May 23-25, 2012. He was the general co-chair of the **8th IEEE International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIHMSP 2012)**,

Piraeus, Greece, July 18-20, 2012. He was the local organizing co-chair of the **10th Joint Conference on Knowledge-Based Software Engineering (JCKBSE 2012)**, Island of Rodos, Greece, August 23-26, 2012. He was the program co-chair of the **23rd IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2012)**, Athens, Greece, November 7-9, 2012. He is the general co-chair of the **5th IEEE International Symposium on Monitoring and Surveillance Research: Healthcare-Safety-Security**, Athens, Greece, November 9, 2012. He was the general co-chair of the **2013 IEEE International Conference on Computer, Information and Telecommunication Systems (CITS2013)**, Piraeus, Greece, May 7-10, 2013. He is the general and program co-chair of the **2013 International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS 2013)**, Sesimbra, Portugal, June 26-28, 2013. He is the general and program co-chair of the **4th International Conference on Information, Intelligence, Systems and Applications (IISA2013)**, Piraeus, Greece, July 10-12, 2013. He is the general co-chair of the **2013 International Conference on Innovation in Medicine and Healthcare (KES-INMED2013)**, Piraeus, Greece, July 17-19, 2013. He is a program area chair of the **25th International Conference on Tools with Artificial Intelligence (ICTAI2013)**, Washington DC, USA, November 4-6, 2013. He is the general and program co-chair of the **2014 International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS 2014)**, Chania, Greece, June 18-20, 2014. He was the Program Chair of the **13th European Conference on Cyber Warfare and Security (ECCWS-2014)**, Piraeus, Greece, July 3-4, 2014. He was the general and program co-chair of the **5th International Conference on Information, Intelligence, Systems and Applications (IISA2014)**, Chania, Greece, July 7-9, 2014. He was the general and program co-chair of the **6th International Conference on Information, Intelligence, Systems and Applications (IISA2015)**, Corfu, Greece, July 6-8, 2014. He was the general and program co-chair of the **7th International Conference on Information, Intelligence, Systems and Applications (IISA2016)**, Porto Carras Grand Resort, Chalkidiki, Greece, July 13-15, 2016. He was the program co-chair of the **8th International Conference on Information, Intelligence, Systems and Applications (IISA2017)**, Golden Bay Beach Hotel, Larnaca, Cyprus, August 28-30, 2017. He was the general and program co-chair of the **9th International Conference on Information, Intelligence, Systems and Applications (IISA2018)**, Zakynthos, Greece, July 23-25, 2018. He was the general co-chair of the **12th Joint Conference on Knowledge-Based Software Engineering (JCKBSE2018)**, Corfu, Greece, August 27-30, 2018. He was the general and program co-chair of the **10th International Conference on Information, Intelligence, Systems and Applications (IISA2019)**, Patra, Greece, July 15-17, 2019. He is the general co-chair of the **11th International Conference on Information, Intelligence, Systems and Applications (IISA2020)**, Piraeus, Greece, July 15-17, 2020. He is the general co-chair of the **13th International Joint Conference on Knowledge-Based Software Engineering (JCKBSE2020)**, Larnaca, Cyprus, August 24-26, 2020. He is serving as a member of Program Committees and/or reviewer of numerous international conferences.

He is a founder and co-chair of the steering committees of the **International Conference on Intelligent Interactive Multimedia Systems and Services (KESInternational IIMSS)** series, the **IEEE International Conference on Information, Intelligence, Systems and Applications (IEEE IISA)** series, the **IEEE Computer, Information and Telecommunication Systems (IEEE CITS)** series and

the **International Conference on Computing, Informatics and Cybersecurity (CCCI)**.

Book authoring (6)

He is the sole author of a book on (1) ***Image Analysis*** (in Greek). He is a co-author of a book on (2) ***Principles and Applications of Signals and Systems*** (in Greek), a monograph on (3) ***Visual Affect Recognition*** (volume 214 in Frontiers in Artificial Intelligence Book Series, IOS Press 2010), a monograph on (4) ***Machine Learning Paradigms - Applications in Recommender Systems*** (volume 92 in Intelligent Systems Reference Library Book Series, Springer 2015), a monograph on (5) ***Machine Learning Paradigms – Artificial Immune Systems and their Applications in Software Personalization*** (volume 118 in Intelligent Systems Reference Library Book Series, Springer 2017), and an upcoming monograph on (6) ***Machine Learning Paradigms - Bio-inspired Approaches in Social Media Analytics*** in Intelligent Systems Reference Library Book Series, under contract to be published by Springer in 2020.

Book editing (22)

He has co-edited the following books: (1) ***Multimedia Services in Intelligent Environments - Advanced Tools and Methodologies***, volume 120 in Studies in Computational Intelligence (SCI) Book Series, Springer 2008, (2) ***Computational Intelligence Paradigms - Innovative Applications***, volume 137 in Studies in Computational Intelligence (SCI) Book Series, Springer 2008, (3) ***New Directions in Intelligent Interactive Multimedia***, volume 142 in Studies in Computational Intelligence (SCI) Book Series, Springer 2008, (4) ***Multimedia Services in Intelligent Environments - Software Development Challenges and Solutions***, volume 2 in Smart Innovation, Systems and Technologies (SIST) Book Series, Springer 2010, (5) ***Multimedia Services in Intelligent Environments - Integrated Systems***, volume 3 in Smart Innovation, Systems and Technologies (SIST) Book Series, Springer 2010, (6) ***Intelligent Interactive Multimedia Systems and Services***, volume 6 in Smart Innovation, Systems and Technologies (SIST) Book Series, Springer 2010, (7) ***Intelligent Interactive Multimedia Systems and Services***, volume 11 in Smart Innovation, Systems and Technologies (SIST) Book Series, Springer 2011, (8) ***e-Business and Telecommunications - Revised Selected Papers of the 7th International Conference on e-Business and Telecommunications***, volume 222 in Communications in Computer and Information Science (CCIS) Book Series, Springer 2012, (9) ***Multimedia Services in Intelligent Environments – Advances in Recommender Systems***, volume 24 in Smart Innovation, Systems and Technologies (SIST) Book Series, Springer 2013, (10) ***Multimedia Services in Intelligent Environments – Recommendation Services***, volume 25 in Smart Innovation, Systems and Technologies (SIST) Book Series, Springer 2013, (11) ***Intelligent Interactive Multimedia Systems and Services***, volume 254 in Frontiers in Artificial Intelligence Book Series, IOS Press 2013, (12) ***Smart Digital Futures 2014***, volume 262 in Frontiers in Artificial Intelligence Book Series, IOS Press 2014, (13) ***Proceedings of the 13th European Conference on Cyber Warfare and Security ECCWS-2014***, Academic Conferences & Publishing International Ltd, 2014, (14) ***Intelligent Interactive Multimedia Systems and Services in Practice***, volume 36 in

Smart Innovation, Systems and Technologies (SIST) Book Series, Springer 2015, (15) **Intelligent Computing Systems – Emerging Application Areas** volume 627 in Studies in Computational Intelligence (SCI) Book Series, Springer 2016, (16) **Machine Learning Paradigms – Advances in Data Analytics**, volume 149 in Intelligent Systems Reference Library Book Series, Springer 2018, (17) **Machine Learning Paradigms – Advances in Learning Analytics**, volume 158 in Intelligent Systems Reference Library Book Series, Springer 2019, (18) **Machine Learning Paradigms – Applications of Learning and Analytics in Intelligent Systems**, volume 1 in Learning and Analytics in Intelligent Systems Book Series, Springer 2019, (19) **Proceedings of the International Conference on Emerging Trends in Engineering (ICETE) – Emerging Trends in Smart Modelling Systems and Design**, volume 2 in Learning and Analytics in Intelligent Systems Book Series, Springer 2019, (20) **Data Communication and Networks – Proceedings of GUCON 2019**, volume 1049 in Advances in Intelligent Systems and Computing Book Series, Springer 2019, (21) **Advances in Core Computer Science-based Technologies - Papers in Honor of Professor Nikolaos Alexandris**, volume 14 in Learning and Analytics in Intelligent Systems Book Series, Springer 2020 and (22) **Machine Learning Paradigms – Advances in Deep Learning Theory and Applications**, under contract to be published by Springer in Learning and Analytics in Intelligent Systems Book Series in 2020.

Special issue editing (10)

He was a guest co-editor of the special issue on “Intelligent Modelling and Data Analysis Techniques” of the **International Journal of Intelligent Defence Support Systems** (Inderscience), vol. 2, no. 2, pp. 73-137, 2009.

He was a guest co-editor of the special issue on “Knowledge-based Modes of Human-Computer Interaction” of the **Intelligent Decision Technologies Journal** (IOS Press), vol. 4, no. 3, pp. 169-237, 2010.

He was a guest co-editor of the special issue on “Knowledge-based Environments and Services in Human-Computer Interaction” of the **Intelligent Decision Technologies Journal** (IOS Press), vol. 5, no. 1, pp. 1-100, 2011.

Editorial of Fourth Issue of First Volume, **International Journal of Computational Intelligence Studies**, vol. 1, number 4, pp. 309-311, 2012

He was a guest co-editor of the special issue on “Multimedia/Multimodal Human-Computer Interaction in Knowledge-based Environments” of the **Intelligent Decision Technologies Journal** (IOS Press), vol. 6, no. 2, pp. 77-185, 2012.

He was a guest co-editor of the special issue on “Intelligent Interactive Multimedia” of the **International Journal on Artificial Intelligence Tools** (World Scientific), vol. 21, no. 2, pp.140, 2012.

He was a guest co-editor of the special issue on “Advances in Affective Computing” of the **International Journal of Computational Intelligence Studies** (Inderscience), vol. 2, no. 1, pp. 1-86, 2013

He was a guest co-editor of the special issue on “Selected Papers from the 24th International Conference on Information, Intelligence, Systems and Applications (ICTAI2012)” of the *International Journal on Artificial Intelligence Tools* (World Scientific), vol. 23, no. 4, 2014.

He was a guest co-editor of the special issue on “Advances in Recommender Systems” of the *Intelligent Decision Technologies Journal* (IOS Press), vol. 9, no. 3, pp. 219-306, 2015.

He was a guest co-editor of the special section on “Surveys in AI-based Technologies” of the *Intelligent Decision Technologies Journal* (IOS Press), vol. 13, no. 4, pp. 393-476, 2019

Serving on editorial boards of Journals (15)

He is co-Founder and co-Editor-in-Chief of the *Learning and Analytics in Intelligent Systems Book Series* (Springer).

He is the Editor-in-Chief of the *Intelligent Decision Technologies Journal* (IOS Press)

He is the Editor-in-Chief of the *International Journal of Computational Intelligence Studies* (Inderscience).

He was Editor-in-Chief of the Engineering Section of *SpringerPlus* (Springer).

He is a member of the editorial board of (1) *Computational Intelligence and its Applications (COMIA) Book Series* (Information Science Publishing), (2) *Intelligent Decision Technologies Journal* (IOS Press), (3) *International Journal of Knowledge and Web Intelligence* (Inderscience Publishers), (4) *ISRN Signal Processing* (Hindawi Publishing), (5) *International Journal on Monitoring and Surveillance Technologies Research* (IGI Global), (6) *Computational Biology and Bioinformatics* (Science Publishing Group), (7) *International Journal of Life Sciences and Medical Research* (World Academic Publishing), (8) *International Journal of Image Mining* (Inderscience), (9) *International Journal on Computer and Communications Networks, Computational Intelligence and Data Analytics* (Publishing Division of Praise Worthy Prize), (10) *International Journal of Applied Systemic Studies* (Inderscience) and (11) *International Journal on Artificial Intelligence Tools* (World Scientific).

He is a reviewer for most of the international journals in his areas of research interest.

Publications summary

- Monographs: 6
- Edited volumes: 25
- Book chapters: 45
- Journal publications: 59
- International conference publications: 165
- Third party citations on googlescholar: 2500+
- h-index on googlescholar: 23 (12 since 2015)

- i10-index on googlescholar: 61 (22 since 2015)

Research recognition and awards I – Keynote speeches (5)

He was a Keynote speaker on *Machine Learning and Analytics with Significantly Imbalanced Data and Applications in Information Systems* at the **2019 IEEE International Conference on Computer, Information and Telecommunication Systems (CITS2019)**, Beijing, China, August 28-31, 2019

He was a Keynote Speaker on *Software Personalization Using Machine Learning with Imbalanced Samples* at the **IEEE International Conference on Computing, Power and Communication Technologies (GUCON2018)**, Greater Noida, Uttar Pradesh, India 28-29 September 2018

He was a Keynote Speaker on *Machine Learning Methodologies in Automated Recommendation* at the **12th Joint Conference on Knowledge-based Software Engineering (JCKBSE2018)**, Corfu, Greece, 27-30 August 2018

He was a Keynote Speaker on *Classification with Significant Class Imbalance and Applications in Software Personalization* at the **29th IEEE International Conference on Tools with Artificial Intelligence (ICTAI2017)**, Boston, MA, USA, 6-8 November 2017

He was a Keynote Speaker on *One Class Classification Problems – Applications in Recommender Systems* at the **Multitheme Conference on Smart Digital Futures (AMSTA, IDT, IIMSS & STET)**, Chania, Crete, Greece, 18 - 20 June 2014

Research recognition and awards II – Best paper awards (4)

He won the **Best Paper Award in the Information Technology Track of the 2019 IEEE International Conference on Computer, Information, and Telecommunication Systems (CITS 2019)**, for co-authoring a paper titled: “AIRS-x: An eXtension to the Original Artificial Immune Recognition Learning Algorithm.”

He also won one the **Best Paper Awards** of the **5th IEEE International Conference on Information, Intelligence, Systems and Applications (IISA)**, Chania, Crete, Greece, July 7-9, 2014, for co-authoring a paper titled: “Genetic-AIRS: A Hybrid Classification Method based on Genetic Algorithms and Artificial Immune Systems”

He also won one of the **Best Applications Papers Award** of the **29th Annual International Conference of the British Computer Society Specialist Group on Artificial Intelligence**, Cambridge, UK, December 15-17, 2009, for co-authoring a paper titled: “On Assisting a Visual-Facial Affect Recognition System with Keyboard-Stroke Pattern Information.”

He won the **Best Poster Paper Award** of the **5th IEEE International Conference on Information Technology: New Generations (IEEE ITNG)**, Las Vegas, USA, April 7-9, 2008, for co-authoring a paper titled: “Evaluation of a Middleware System for Accessing Digital Music Libraries in Mobile Services.”

Family status

He is married to Dr. Maria Virvou, Professor of Computer Science at the University of Piraeus, and father of three daughters.

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