Ioannis Karydis Curriculum Vitae

PERSONAL INFORMATION

Name: Ioannis Karydis
Email: karydis@ionio.gr
Postal address: Department of Informatics, Ionian University, 7 Tsirigoti Square, 49132 Corfu, Greece
Date & Place of Birth: 27th April 1979, Athens, Greece
Military obligations: Fulfilled

CURRENTLY

• Assistant Prof. at the Dept. of Informatics, Ionian University, Greece

ACADEMICS

PhD in Computer Science

Aristotle University of Thessaloniki, Greece
Grade: Excellent
Duration: April 2002 - June 2006
Thesis Title: Mining and retrieval methods for acoustic and symbolic musical data.
Supervisor: prof. Yannis Manolopoulos.

MSc Advanced Methods in Computer Science

Queen Mary, University of London, UK, Scholar of EPSRC, Grade: Pass, Study duration: 09/2000-10/2001, MSc modules:

1. Interactive Systems Design - Interactive interfaces design, theory and practice (Software DVD Player Interface design in Visual Basic 6 & MSc Thesis in Java).
2. Parallel Programming and Architectures - Theory of structure and architecture of parallel systems, practice in parallel video compression using the DCT algorithm in C.

3. Multimedia Systems - Image, sound, real-time broadcasting & Internet multimedia theory, multimedia databases, data compression. Practice in multimedia application ('Learn Greek for Tourists') including content and interface design using Macromedia Director.
4. Computer Mediated Communication - Computer based human communication systems theory. General human communication theory. Practice in already existing systems ("RVM" - Lucent Technologies).
5. MSc Thesis, 'Voice Enabled Email Browser' -Email Client design using standard input/output devices (keyboard, mouse, monitor) as well as vocal commands. The main target of the research was the best design of the interface (trade-off between standard & non standard i/o devices) in order to increase the productivity & satisfaction of the user. Written in Java.

Honours BEng Engineering Science & Technology

Brunel University, UK, Grade: 2.2, Study duration: 09/1997-06/2000.

BEng Dissertation / BEng Final Year Project: 'An Infrared Communication System' - Design of a communication application using infrared for industrial environments. Drivers and interface development (real-time "chat-board", transfer status informational windows for file transfers and security). The application's main target was the industrial environments, thus high error correction design algorithms have been implemented to support the peculiarities of industrial environments.

High-school leaving Certificate

Graduated in June 17th, 1997. Grade 18 & 6 tenths (18 6/10) out of 20. 2nd High School, Corfu, Greece.

RESEARCH INTERESTS

My current research interests focus on Content-Based Music Information Retrieval, Music Data Mining as well as Multimedia Information Retrieval) as well as the development of systems for the dissemination/retrieval of cultural content. Some of my latest research is on:

- Musical genre classification
- Voice separation in polyphonic music
- Continuous querying in musical streams
- Design of cultural informational systems
- Music information retrieval user interface design
- Musical data similarity using contextual information
- Musical data management in p2p networks
- Security issues in databases
- Collective intelligence in online media

FUNDING AND PROJECTS

- Scholar of General Secretariat for Research and Technology during PhD studies, 2002-2006. Budget: approx. 33.000 Euros. Role: Main researcher.
- "Data Management in Mobile Ad Hoc Networks". Funding: General Secretariat for Research and Technology, 2005-2006. Budget: approx. 127.000 Euros. Role: Member of the research team, software development and implementation of experimental methods from the researched areas.
- "A Flexible Music Data Management System Using Combination Query Criteria". Funding: General

Secretariat for Research and Technology, 2006-2007. Budget: approx. 600.000 Euros. Role: Member of the research team, research and develop methods for musical data management using combination query criteria.

- "EuDML - European Digital Mathematics Library". Partially funded by the EC, 2010-2013. Cumulative Budget: 1.6 mil Euros. Partner budget: approx. 85.000 Euros. Role: Member of the Ionian University partner research team, design and develop the Hellenic Digital Mathematics Library and provide content to EuDML.
- "Development of web-accessible prosopographical database for the coding, indexing and evaluation of the archives of the Greek regeneration". Funding: Department of History of the Ionian University, 2011-2012. Budget: approx. 30.000 Euros. Role: Member of the research team, software development and implementation.
- "Cloud9" - Information Storage, Retrieval, and Analysis over Internet-Scale Cloud Stores, Funded by the Greek Ministry of Education, Sept 2011 - Aug 2014. Role: Postdoc Research Fellow.
- "Development of an e-reservation system of tourist rooms through auctions", Funded by [ΕΣΠΑ - Πρόγραμμα Ανταγωνιστικότητα & Επιχειρηματικότητα](), Apr 2011 - Apr 2013, Role: Member of the development team.
- "Development of printed educational material for the new courses", Hellenic Open University, Funded by [ΕΣΠΑ - Πρόγραμμα Ανταγωνιστικότητα & Επιχειρηματικότητα](), June 2013 - Dec 2013, Role: Author.
- "Improving governance, management and sustainability of rural and coastal protected areas and contributing to the implementation of the Natura 2000 provisions in IT and GR (BIG)", Ionian University, Funded by [European Territorial Cooperation Programme INTERREG IV "Greece-Italy 2007-2013"](), Jan 2014 - Dec 2015, Role: Researcher / developer.
- "Enchancing Olive Oil Production with use of Innovative ICT (E-Olive)", Ionian University, Funded by [IPA Cross-Border Programme "Greece - Albania 2007 - 2013"](), Apr 2014 – Mar 2016, Role: Researcher / developer.
- "Open Academic Digital Cources for the Ionian University (OpenCources)", Ionian University, Funded by [Εκπαίδευση και Δια βίου Μάθηση 2007-2013"](), Jan 2013 – Dec 2015, Role: Course developer.
- "Hellenic Electronic Academic Books and Supportive Material", Funded by [Εκπαίδευση και Δια βίου Μάθηση 2007-2013"](), Oct 2014 - Sep 2015, Role: Author.

WEBSITE DESIGN & DEVELOPMENT

- Design and development of static website for the conference 5th Workshop on Distributed Data and Structures (WDAS 2003). http://delab.csd.auth.gr/wdas2003/
- Design and development of static website for the conference 5th Hellenice Data Management Symposium (HDMS 2006). http://delab.csd.auth.gr/hdms2006/
- Design and development of static website for the conference 10th International Conference on Engineering Applications of Neural Networks (EANN 2007). http://delab.csd.auth.gr/eann2007/
- Design and development of dynamic website for the Hellenic Digital Mathematics Library. The website uses user-friendly URLs, customised google search and dissemination of content for online & offline reading. The website uses technologies such as PHP, LightBox, MySQL, CSS3. http://www.hdml.gr/
- Design and development of dynamic website for conference registration. The website uses technologies such as PHP, MySQL. Used already by the following conferences: [EANN 2007](), [AIAI 2009](), [ICANN 2010](), [PSD 2010](), [EANN 2011](), [AIAI 2011](), [AIAI 2012](), [AIAI 2014](), [WISE 2014](), [CAISE 2014](), [EANN 2015](), [MEDI 2015](), [AIAI 2016](), [ICCCI 2016](), [EANN 2017](), [TPDL 2017]().
- Design and development of static website for the conference 8th Artificial Intelligence Applications and Innovations (AIAI 2012). http://delab.csd.auth.gr/aiai2012/

- Design and development of static website for the conference 14th Engineering Applications of Neural Networks (EANN 2013). http://delab.csd.auth.gr/eann2013/
- Design and development of a full-featured dynamic informational system for the management of the Unit Innovation and Entrepreneurship of the Ionian University. The informational system uses technologies such as PHP, MySQL, AJAX, CSS3, user-friendly URLs. http://dasta.ionio.gr/mke

OTHER LANGUAGE QUALIFICATIONS

- University of Cambridge Certificate of Proficiency in English, grade C, June 1996.
- French Language Certificate (Certificat de Langue Francaise), D.E.L.F 1, grade "Pass" (Passable), May 1995.
- D.E.L.F 2nd degree (2nd degré), grade "Pass" (Passable), May 1996

RESEARCH PUBLICATIONS

In conferences

1. Karydis, I., Nanopoulos, A., Manolopoulos, Y.: "An Efficient Algorithm for Mining Maximum-Length Repeating Patterns in Music Objects", Proceedings 9th Pan-Hellenic Conference on Informatics, pp. 375-387, 2003. pdf | bib
2. Karydis I., Nanopoulos A., Papadopoulos A., Manolopoulos Y.: "Audio Indexing for Efficient Music Information Retrieval", Proceedings International Multimedia Modelling Conference, pp. 22-29, 2005. pdf | bib
3. Karydis I., Nanopoulos A., Papadopoulos A., Manolopoulos Y.: "Music Retrieval in P2P Networks under the Warping Distance", International Conference on Enterprise Information Systems, pp. 100-107, 2005. pdf | bib
4. Karydis I., Nanopoulos A., Papadopoulos A., Katsaros, D., Manolopoulos Y.: "Content-Based Music Information Retrieval in Wireless Ad-hoc Networks", International Symposium in Music Information Retrieval, pp.137-144, 2005. pdf | bib
5. Karydis I.: "Symbolic Music Genre Classification based on Note Pitch and Duration", Proceedings 10th Advances in Databases and Information Systems, pp. 329-338, 2006. (Best student paper award) pdf | bib
6. Karydis, I., Nanopoulos, A., Manolopoulos, Y.: "Symbolic Musical Genre Classification based on Repeating Patterns", Proceedings Workshop on Audio and Music Computing for Multimedia, ACM Multimedia, pp. 53-58, 2006. pdf | bib
7. Kontaki, M., Karydis, I, Manolopoulos, Y: "Content-based Information Retrieval in Streaming Music", Proceedings of Pan-Hellenic Conference in Informatics, pp.249-259, 2007. pdf | bib
8. Karydis, I., Nanopoulos, A., Papadopoulos, A., Cambouropoulos, E., Manolopoulos, Y.: "Horizontal and Vertical Integration/Segregation in Auditory Streaming: A Voice Separation Algorithm for Symbolic Musical Data", Proceedings Sound and Music Computing Conference, pp.299-306, 2007. pdf | bib
9. Karydis, I., Nanopoulos, A., Papadopoulos, A., Cambouropoulos, E.: "VISA: The voice integration/segregation algorithm", Proceedings International Symposium in Music Information Retrieval, pp. 445-448, 2007. pdf | bib
10. Karydis, I., Laopodis, V.: "Web 2.0 Cultural Networking", Proceedings of 13th Pan-Hellenic Conference in Informatics, 2009. bib

11. Karydis, I., Nanopoulos, A., Gabriel, H.-H., Spiliopoulou, M.: "Tag-Aware Spectral Clustering of Music Items", Proceedings International Society for Music Information Retrieval, pp. 159-164, 2009. pdf | bib

12. Karydis, I., Radovanovic, M., Nanopoulos, A. Ivanovic, M.: "Looking Through the 'Glass Ceiling': A Conceptual Framework for the Problems of Spectral Similarity", Proceedings International Society for Music Information Retrieval, pp. 273-278, 2010. pdf | bib

13. Sioutas, S., Magkos, E., Karydis, I., Verykios, V.S.: "Uncertainty for Anonymity and 2 Dimensional Range Query Distortion", Proceedings Privacy in Statistical databases, pp. 85-96, 2010. pdf | bib

14. Nanopoulos, A., Karydis, I.: "Know thy Neighbor: Combining Audio Features and Social Tags for Effective Music Similarity", Proceedings International Conference on Acoustics, Speech and Signal Processing, 2011. pdf | bib

15. Karydis, I., Nanopoulos, A.: "Audio-to-Tag Mapping: A Novel Approach for Music Similarity Computation", Proceedings IEEE International Conference on Multimedia & Expo, 2011. pdf | bib

16. Karydis, I., Deliyannis, I., Floros, A.: "Augmenting Virtual-Reality Environments with Social-Signal Based Music Content", Proceedings International Conference on Digital Signal Processing, 2011. pdf | bib

17. Deliyannis, I., Karydis, I.: "Producing and Broadcasting Non-Linear Art-Based Content through Open Source Interactive Internet-TV", Proceedings European Interactive TV Conference, 2011. pdf | bib

18. Tsolis, D., Sioutas, S., Panaretos, A., Karydis, I., Oikonomou, K.: "Decentralized Digital Content Exchange and Copyright Protection via P2P Networks", Proceedings IEEE Symposium on Computers and Communications, 2011. pdf | bib

19. Deliyannis, I., Karydis, I., Anagnostou, K.: "Enabling Social Software-Based Musical Content for Computer Games and Virtual Worlds", Proceedings Internet Technologies and Applications, 2011. pdf | bib

20. Sioutas, S., Tsichlas, K., Karydis, I., Manolopoulos, Y., Theodoridis, Y.: "NEFOS: Rapid Cache-Aware Range Query Processing with Probabilistic Guarantees", Proceedings Database and Expert Systems Applications, 2011. pdf | bib

21. Boletsis, C., Gratsani, A., Chasanidou, D., Karydis, I., Kermanidis K.: "Comparative Analysis of Content-based and Context-based Similarity on Musical Data", Proceedings Artificial Intelligence Applications and Innovations, 2011. pdf | bib

22. Deliyannis, I., Karydis, I, Karydi, D.: "imediaTV: Open and Interactive Access for Live Performances and Installation Art", Proceedings International Conference on Information Law, 2011. pdf | bib

23. Sioutas, S., Panaretos, A., Karydis, I., Tsoumakos, D.: "SART: Dynamic P2P Query Processing in Sensor Networks with Probabilistic Guarantees", Proceedings of the 27th Symposium on Applied Computing (ACM SAC 2012), 2012. pdf | bib

24. Karydi, D., Karydis, I., Deliyannis, I.: "Legal Issues in Using Musical Content from iTunes and YouTube for Music Information Retrieval", Proceedings International Conference on Information Law, 2012. pdf | bib

25. Brilis, S., Gkatzou, E., Koursoumis, A., Talvis, K., Kermanidis, K. L., Karydis, I.: "Mood Classification using Lyrics and Audio: A Case-study in Greek Music", Proceedings Artificial Intelligence Applications and Innovations, pp. 421-430, 2012. pdf | bib

26. Karydis, I., Avlonitis, M., Sioutas, S.: "Collective Intelligence in Video User's Activity", Proceedings Artificial Intelligence Applications and Innovations, pp. 490-499, 2012. pdf | bib

27. Faliagka, E., Karydis, I., Rigou, M., Sioutas, S., Tsakalidis, A., Tzimas, G.:"Taxonomy development and its impact on a self-learning e-recruitment system", Proceedings Artificial Intelligence Applications and Innovations, 2012. pdf | bib

28. Nanopoulos, A., Rafailidis, D., Karydis, I.: "Matrix Factorization with Content Relationships for

Media Personalization", 11th International Conference Wirtschaftsinformatik, pp. 87-101, 2013. [pdf](#) | [bib](#)

29. Spiridonidou, A., Karydis, I., Avlonitis, M.: "Mimicking Real Users' Interactions on Web Videos through a Controlled Experiment", Proceedings Engineering Applications of Neural Networks, pp. 60-69, 2013. [pdf](#) | [bib](#)

30. Karydis, I., Gratsanis, P., Semertzidis, C., Avlonitis, M.: "WebGIS Design & Implementation for Pest Life-cycle & Control Simulation: The Case of Olive-fruit Fly", International Conference on Information and Communication Technologies in Agriculture, Food and Environment, pp. 526-529, 2013. [pdf](#) | [bib](#)

31. Karydi, D., Karydis, I.: "Legal Issues of Aggregating and Curating Information Flows: The case of RSS protocol", Proceedings of International Conference on Information Law and Ethics, 2014. [pdf](#) | [bib](#)

32. Makris, D., Kermanidis, K. L., Karydis, I.: "The Greek Audio Dataset", Proceedings Artificial Intelligence Applications and Innovations, Vol. 437, pp. 165-173, 2014. [pdf](#) | [bib](#)

33. Makris, D., Karydis, I., Sioutas, S.: "The Greek Music Dataset", Proceedings Engineering Applications of Neural Networks, pp. 22:1--22:7, 2015. [pdf](#) | [bib](#)

34. Kalamatianos, R., Kermanidis, K., Avlonitis, M., Karydis, I.: "Environmental Impact on Predicting Olive Fruit Fly Population Using Trap Measurements", Proceedings International Conference on Artificial Intelligence Applications and Innovations, 2016. [pdf](#) | [bib](#)

35. Karydis, I., Gkiokas, A., Katsouros, V.: "Musical Track Popularity Mining Dataset", Proceedings Artificial Intelligence Applications and Innovations, pp. 562-572, 2016. [pdf](#) | [bib](#)

36. Makris, D., Karydis, I., Cambouropoulos, E.: "VISA^3: Refining the Voice Integration/Segregation Algorithm", Proceedings Sound and Music Computing Conference, pp. 266-273, 2016. [pdf](#) | [bib](#)

37. Karydis, I., Sioutas, S., Avlonitis, M., Mylonas, P., Kanavos, A.: "A Survey on Big Data and Collective Intelligence", Proceedings of International Workshop on Algorithmic Aspects of Cloud Computing, 2016. [pdf](#) | [bib](#)

38. Makris, D., Kaliakatsos-Papakostas, M., Karydis, I., Kermanidis, K.: "Combining LSTM and Feed Forward Neural Networks for Conditional Rhythm Composition", Proceedings Engineering Applications of Neural Networks, pp. 570-582, 2017. [pdf](#) | [bib](#)

39. Karydis, I., Kanavos, A., Sioutas, S., Avlonitis, M., Karacapilidis, N.: "LeSiM: A Novel Lexical Similarity Measure Technique for Multimedia Information Retrieval", Proceedings Mediterranean Conference on Information Systems, 2018. [pdf](#) | [bib](#)

40. Campos, L. M., Ribeiro, L. L., Karydis, I., Karagiannis, S., Pedro, D., Martins, J., Marques, C., Armada, A. G., Leal, R. P., López-Morales, M. J., Velez, F. J., Sebastião, P., Ramos, A. : "Reference Scenarios and Key Performance Indicators for 5G Ultra-dense Networks", Proceedings International Symposium on Communication Systems, Networks and Digital Signal Processing, 2020. [bib](#)

41. Vlachos I., Kalamatianos R., Karydis I., Spiridonidou A., Avlonitis M.: "Utilization of New Technologies in the Production of Pharmaceutical Olive Oil", GeNeDis 2018. Advances in Experimental Medicine and Biology, vol 1194. Springer, 2020. [pdf](#) | [bib](#)

In journals

1. Karydis, I., Nanopoulos, A., Papadopoulos, A., Manolopoulos, Y.: "Evaluation of Similarity Searching Methods for Music Data in Peer-to-Peer Networks", International Journal of Business Intelligence and Data Mining, Vol. 1, No.2, pp. 210-228, 2006. [pdf](#) | [bib](#)

2. Karydis, I., Nanopoulos, A., Manolopoulos, Y.: "Finding Maximum-Length Repeating Patterns in Music Databases", Multimedia Tools & Applications, Vol.32, No.1, pp. 49-71, 2007. [pdf](#) | [bib](#)

3. Karydis I., Nanopoulos A., Papadopoulos A., Katsaros, D., Manolopoulos, Y.: "Music Retrieval over Wireless Ad-hoc Networks", IEEE Transactions on Audio, Speech and Language Processing,

Vol.16, No.6, pp.1152-1162, 2008. [pdf](#) | [bib](#)

4. Sioutas, S., Magkos, E., Karydis, I., Verykios, V. S.: "Uncertainty for Privacy and 2-Dimensional Range Query Distortion", Journal of Computing Science and Engineering, Vol. 5, No. 3, pp. 210-222, 2011. [pdf](#) | [bib](#)

5. Karydis, I., Kermanidis, K.L., Sioutas, S., Iliadis, L.: "Comparing Content and Context based Similarity for Musical Data", Neurocomputing, Vol. 107, No. 0, pp. 69-76, 2013.[pdf](#) | [bib](#)

6. Sioutas, S., Panaretos, A., Karydis, I.,Tsoumakos, D., Tzimas, G., Tsolis, D."SART: Speeding up Query Processing in Sensor Networks with an Autonomous Range Tree Structure", Applied Computing Review, Vol. 12, No. 3, 2012. [pdf](#) | [bib](#)

7. Faliagka, E., Iliadis, L., Karydis, I., Rigou, M., Sioutas, S., Tsakalidis, A., Tzimas, G.:"On-line Consistent Ranking on E-recruitment; Seeking the truth behind a well-formed CV", Artificial Intelligence Review, pp. 1-14, 2013. [pdf](#) | [bib](#)

8. Karydis, I., Avlonitis, M., Chorianopoulos, K., Sioutas, S.:"Identifying Important Segments In Videos: A Collective Intelligence Approach", International Journal on Artificial Intelligence Tools, Vol. 23, No. 02, 2014. [pdf](#) | [bib](#)

9. Kermanidis, K. L., Karydis, I., Koursoumis, A., Talvis, K.:"Combining Language Modeling And Lsa On Greek 'Song Words' For Mood Classification", International Journal on Artificial Intelligence Tools, Vol. 23, No. 02, 2014. [pdf](#) | [bib](#)

10. Avlonitis, M., Karydis, I., Sioutas, S.:"Early Prediction In Collective Intelligence On Video Users' Activity", Information Sciences, Vol. 298, pp. 315-329, 2015. [pdf](#) | [bib](#)

11. Karydis, I., Avlonitis, M., Mylonas, P., Sioutas, S.: "Detection and Feature Extraction of Collective Activity in Human-Computer Interaction", International Journal of Advanced Computer Science and Applications (IJACSA), Vol. 7, No 3, 2016. [pdf](#) | [bib](#)

12. Drakopoulos, G., Kanavos, A., Karydis, I., Sioutas, S., Vrahatis, A.G.: "Tensor-Based Semantically-Aware Topic Clustering of Biomedical Documents", Computation, Vol. 5. No 3, 2017 [pdf](#) | [bib](#)

13. Arvanitakis, K., Karydis, I., Kermanidis, K. L., Avlonitis, M.: "A Machine Learning Approach for Asperities' Location Identification", Evolving Systems, 1868-6486, 2017 [pdf](#) | [bib](#)

14. Kalamatianos, R., Kermanidis, K., Karydis, I., Avlonitis, M.: "Treating Stochasticity of Olive-Fruit Fly's Outbreaks via Machine Learning Algorithms", Neurocomputing, Vol. 280, pp. 135-146, 2018. [pdf](#) | [bib](#)

15. Karydis, I., Gkiokas, A., Katsouros, V., Iliadis, L.: "Musical Track Popularity Mining Dataset: Extension & Experimentation", Neurocomputing, Vol. 280, pp. 76-85, 2018. [pdf](#) | [bib](#)

16. Makris, D., Kaliakatsos-Papakostas, M., Karydis, I., Kermanidis, K. L.: "Conditional Neural Sequence Learners for Generating Drums' Rhythms", Neural Computing and Applications, Vol. 31, No. 6, pp. 1793–1804, 2018. [pdf](#) | [bib](#)

17. Kalamatianos, R., Karydis, I., Doukakis, D., Avlonitis, M.: "DIRT: The Dacus Image Recognition Toolkit", Journal of Imaging, Vol. 14, No. 11, 2018. [pdf](#) | [bib](#)

18. Kalamatianos, R., Karydis, I., Avlonitis, M.: "Methods for the Identification of Microclimates for Olive Fruit Fly", Agronomy, Vol. 9, No. 6, 2019. [pdf](#) | [bib](#)

19. Karydis, I., Kanavos, A., Sioutas, S., Avlonitis, A., Karacapilidis, N.: "Multimedia Content's Brokerage: An Information System Based on LeSiM", International Journal of E-Services and Mobile Applications, Vol. 12, No. 2, pp. 40-58, 2020. [pdf](#) | [bib](#)

Book chapters

1. Karydis, I., Nanopoulos, A., Manolopoulos, Y.: "Mining in Music Databases", chapter in book "Processing and Managing Complex Data for Decision Support", IDEA Group, pp. 340-374, 2006. [pdf](#) | [bib](#)

2. Karydis, I., Manolopoulos, Y.: "Music Information Retrieval in P2P Networks", chapter in book

"Intelligent Music Information Systems: Tools and Methodologies", IGI Global, pp. 190-216, 2007. [pdf](pdf) | [bib](bib)

3. Avlonitis, M., Karydis, I., Chorianopoulos, K., Sioutas, S.: "Treating collective intelligence in online media", chapter in book "Semantic Multimedia Analysis and Processing", CRC Press / Taylor & Francis, 2014. [pdf](pdf) | [bib](bib)

4. Makris, D., I. Karydis, Sioutas, S.: "Automatic Melodic Harmonization: An overview, challenges and future directions", chapter in book "Trends in Music Information Seeking, Behavior, and Retrieval for Creativity", IGI Global, doi:10.4018/978-1-5225-0270-8, 2016. [pdf](pdf) | [bib](bib)

5. Karydi, D., I. Karydis: "Greek copyright law framework for musical databases & academic research use", chapter in book "Trends in Music Information Seeking, Behavior, and Retrieval for Creativity", IGI Global, doi:10.4018/978-1-5225-0270-8, 2016. [pdf](pdf) | [bib](bib)

Book edited

1. Karydis, I. (ed.): "Multimedia - A Multidisciplinary Approach to Complex Issues", 2012, ISBN 978-953-51-0216-8, InTech. [pdf](pdf) | [bib](bib)

Conference proceedings edited

1. Karydis, I., Sioutas, S., Triantafillou, P., Tsoumakos, D. (Eds.): "First International Workshop, Algorithmic Aspects of Cloud Computing (ALGOCLOUD 2015), Patras, Greece, September 14-15, 2015. Revised Selected Papers", 2016, ISBN {978-3-319-29918-1, Springer. website | [bib](bib)

2. Kamps, J., Tsakonas, G., Manolopoulos, Y., Iliadis, L., Karydis, I. (Eds.): "21st International Conference on Theory and Practice of Digital Libraries, TPDL 2017, Thessaloniki, Greece, September 18-21, 2017, Proceedings", 2017, ISBN 978-3-319-67008-9, Springer. website | [bib](bib)

Books

1. (in Greek) Σιούτας, Σ, Τζήμας, Ι., Καρύδης Ι.: "Σύγχρονες Μέθοδοι Προγραμματισμού" (Contemporary programming methods), Ελληνικό Ανοικτό Πανεπιστήμιο, ISBN 978-960-538--82-6.

2. (in Greek) Καρύδης Ι.: "Εισαγωγή στην ανάκτηση και εξόρυξη μουσικής πληροφορίας" (Introduction to musical data retrieval and mining), Ελληνικά Ακαδημαϊκά Ηλεκτρονικά Συγγράμματα και Βοηθήματα (Κάλλιπος), to appear.

Documents and citations by google scholar and ResearchGate

STUDENT MENTORING

1. Andreas Reggios, MSc Thesis, "Creation of android mobile client and server applications that retrieve image information based on similarity and geolocation information" (free translation of Greek "Δημιουργία ζεύγους εφαρμογών πελάτη φορητής συσκευής android και διακομιστή ανάκτησης πληροφορίας εικόνας βάσει ομοιότητας και γεωγραφικού στίγματος"), Dept. of Informatics, Ionian University, Greece, 2013. Thesis website | English executive summary

2. Panagiotis Pandis, MSc Thesis, "Visualization of musical database elements" (free translation of Greek "Οπτικοποίηση εγγραφών μουσικών βάσεων δεδομένων"), Dept. of Informatics, Ionian University, Greece, 2013. Thesis website | Greek executive summary

3. Dimos Makris, MSc Thesis, "Introducing the Greek Audio Dataset" (free translation in Greek "Εισαγωγή του Ελληνικού Ακουστικού Συνόλου Δεδομένων"), Dept. of Informatics, Ionian University, Greece, 2014. [Thesis website](#) | [Greek executive summary](#)
4. Stilianos Kiousis, MSc Thesis, "Design and Development of Electronic Travel Guide Software with Portable Devices' Technologies for Touristic Points of Interest" (free translation of Greek "Σχεδιασμός και Ανάπτυξη Λογισμικού Ηλεκτρονικής Περιήγησης με Τεχνολογίες Φορητών Συσκευών για Τουριστικούς Χώρους Ενδιαφέροντος"), School of Science and Technology. of Informatics, Hellenic Open University, Greece, 2018. [Thesis website](#) | [English executive summary](#)
5. Stavros Antoniou, MSc Thesis, "Playlist creation system based on audio content and contextual information of musical pieces" (free translation of Greek "Σύστημα δημιουργίας αλληλουχιών μουσικών κομματιών (playlists) βάσει πληροφορίας συναφούς πλαισίου και περιεχομένου μουσικών κομματιών"), School of Science and Technology. of Informatics, Hellenic Open University, Greece, 2018. [Thesis website](#) | [English executive summary](#)

WORKING EXPERIENCE

1. 1/05/2002 - 31/09/2003 Computer technician for RFS S.A.
2. Instructor of module "Operating Systems" (theory and lab - 4 hours/week), IEK Thessaloniki I, autumn semester 2003.
3. Instructor of module "Computer Architecture" (theory - 2 hours/week), IEK Triandrias I, autumn semester 2003.
4. Instructor of module "Computer Networks" (lab - 8 hours/week), IEK Thessaloniki I, autumn semester 2004.
5. Instructor of module "Computer Networks" (labs - 2 hours/week), IEK Thessaloniki I, spring semester 2005.
6. Instructor of module "Computer Architecture" (lab - 2 hours/week IEK Thessaloniki I, autumn semester 2005.
7. Instructor of module "Operating Systems II" (theory - 2 hours/week), IEK Thessaloniki I, spring semester 2006.
8. Instructor of module "Computer Networks III" (lab - 2 hours/week), IEK Thessaloniki I, autumn semester 2006.
9. Instructor of module "Design and Development of WebPages I & II" (lab - 5 hours/week), IEK AKMI, autumn semester 2006.
10. Adjunct lecturer at the department of Informatics, Ionian University. February 2007 - August 2007. Courses taught: (a) Databases, (b) Cultural Informatics.
11. Adjunct lecturer at the department of Informatics, Ionian University. September 2007 - January 2008. Courses taught: (a) Music Informatics, (b) Multimedia.
12. Adjunct lecturer at the department of Informatics, Ionian University. February 2009 - August 2009. Courses taught: (a) Decision Support Systems, (b) Social and Legal Issues in Information Technology
13. Adjunct lecturer at the department of Informatics, Ionian University. September 2009 - January 2010. Courses taught: (a) Databases II, (b) E-Commerce, (c) Digital Image Processing, (d) Information Systems Applications.
14. Adjunct lecturer at the department of Informatics, Ionian University. February 2010 - August 2010. Courses taught: (a) Speech Processing, (b) Cultural Informatics, (c) Web Application Programming (postgraduate).
15. Adjunct lecturer at the department of Informatics, Ionian University. September 2010 - January 2011. Courses taught: (a) Databases II lab, (b) Mathematical Programming, (c) Digital Image Processing, (d) Informatics Instruction I.
16. Adjunct lecturer at the department of Informatics, Ionian University. February 2011 - August

2011. Courses taught: (a) Speech and Sound Processing, (b) Cultural Informatics, (c) Electronic Commerce (postgraduate), (d) Decision Support Systems.

17. Adjunct lecturer at the department of Informatics, Ionian University. September 2011 - January 2012. Courses taught: (a) Digital Image Processing, (b) Informatics Instruction I.

18. Adjunct lecturer at the department of Informatics, Ionian University. February 2012 - June 2012. Courses taught: (a) Speech and Sound Processing, (b) Cultural Informatics.

19. Adjunct lecturer at the department of Informatics, Ionian University. September 2012 - January 2013. Courses taught: (a) Digital Image Processing, (b) Informatics Instruction I., (c) Virtual worlds & video games

20. Adjunct lecturer at the department of Informatics, Ionian University. February 2013 - June 2013. Courses taught: (a) Speech and Sound Processing, (b) Cultural Informatics., (c) Video games (postgraduate).

21. Part-time Academic Staff, Hellenic Open University. October 2013 - July 2014. Course taught: PLS-60 Specialization in Software Engineering (for the Master's in Information System MSc course).

22. Adjunct lecturer at the department of Informatics, Ionian University. February 2014 - June 2014. Courses taught: (a) Speech and Sound Processing, (b) Cultural Informatics.

23. Adjunct lecturer at the department of Informatics, Ionian University. September 2014 - January 2015. Courses taught: Digital Image Processing

24. Post-doctoral researcher in the field of Music Information Retrieval, Institute of Language and Speech Processing, "Athena" Research and Innovation Center. December 2014 - May 2015.

25. Adjunct lecturer at the department of Informatics, Ionian University. February 2015 - June 2015. Courses taught: (a) Speech and Sound Processing, (b) Cultural Informatics.

26. Adjunct lecturer at the department of Informatics, Ionian University. September 2015 - January 2016. Courses taught: (a) Digital Image Processing, (b) Advanced Topics in Databases and Data Structures (postgraduate).

27. Adjunct lecturer at the department of Informatics, Ionian University. February 2016 - June 2016. Courses taught: (a) Speech and Sound Processing, (b) Decision Support Systems.

28. Adjunct lecturer at the department of Informatics, Ionian University. September 2016 - January 2017. Courses taught: (a) Digital Image Processing, (b) Advanced Topics in Databases and Data Structures (postgraduate).

29. Adjunct lecturer at the department of Informatics, Ionian University. February 2017 - June 2017. Courses taught: (a) Speech and Sound Processing, (b) Decision Support Systems, (c) Medical Imaging Systems, Analysis and Image Processing (postgraduate).

30. Part-time Academic Staff, Hellenic Open University. October 2017 - July 2018. Course taught: PLS-50 Fundamental Specialization in Theory and Software (for the Master's in Information System MSc course).

31. Adjunct lecturer at the department of Informatics, Ionian University. September 2017 - January 2018. Courses taught: (a) Digital Image Processing, (b) Advanced Topics in Databases and Data Structures (postgraduate).

32. Adjunct lecturer at the department of Informatics, Ionian University. February 2018 - June 2018. Courses taught: (a) Speech and Sound Processing, (b) DataBases I, (c) Data Structures.

33. Casual researcher at the School of Computer Science, Manchester University, UK. September 2018 - December 2018.

34. Research associate at the School of Computer Science, Manchester University, UK. February 2019 - August 2019.

35. Adjunct lecturer at the department of Informatics, Ionian University. February 2019 - June 2019. Courses taught: (a) Speech and Sound Processing, (b) DataBases I, (c) Data Structures.

TECHNICAL SKILLS

Operating Systems

- Microsoft Windows XP, Vista, 7, 8, 10
- Linux

Programming languages

- .Net, Java, Visual Basic, C/C++/C#, Pascal, Python

Scripting languages

- Java Script, PHP, ASP, AJAX

Scripting frameworks

- jQuery, Laravel, CodeIgniter

Markup languages

- XML, HTML

Commercial packages

- Microsoft Office,
- Adobe Photoshop,
- Latex,
- Matlab

OTHER ACTIVITIES

- Program committee of conference "ACM/SIGAPP Symposium On Applied Computing", 2012-2018.
- Organisation committee of conference "International Conference on Theory and Practice of Digital Libraries", Thessaloniki, Greece, 2017.
- Organisation committee of conference"IEEE Conference on Business Informatics", Thessaloniki, Greece, 2017.
- Organisation committee of conference"International Conference on Engineering Applications of Neural Networks", Athens, Greece, 2017.
- Organisation committee of conference "INNS Conference on Big Data", Thessaloniki, Greece, 2016.
- Organisation committee of conference "International Conference on Artificial Intelligence Applications and Innovations", Thessaloniki, Greece, 2016.
- Program committee of conference "Mining Humanistic Data Workshop", Thessaloniki, Greece, 2016.

- Program committee of conference "Semantic and Social Media Adaptation and Personalization", Trento, Italy, 2015.
- Organisation committee of conference "Mining Humanistic Data Workshop", Rhodes Island, Greece, 2015.
- Organisation committee of conference " International Conference on Model & Data Engineering", Rhodes Island, Greece, 2015.
- Organisation committee of conference "International Conference on Engineering Applications of Neural Networks", Rhodes Island, Greece, 2015.
- Organisation committee of conference "Mining Humanistic Data Workshop", Rhodes Island, Greece, 2014.
- Organisation committee of conference "International Workshop on Semantic and Social Media Adaptation and Personalization", Corfu, Greece, 2014.
- Organisation committee of conference "International Conference on Artificial Intelligence Applications and Innovations", Rhodes Island, Greece, 2014.
- Organisation committee of conference "International Conference on Web Information System Engineering", Thessaloniki, Greece, 2014.
- Organisation committee of conference "International Conference on Advanced Information Systems Engineering", Thessaloniki, Greece, 2014.
- Program committee of conference "Artificial Intelligence Applications and Innovations", Paphos, Cyprus, 2013.
- Organisation committee of conference "Engineering Applications of Neural Networks", Halkidiki, Greece, 2013.
- Program committee of conference "AudioMostly", Corfu, Greece, 2012.
- Organisation committee of conference "ACOUSTICS 2012", Corfu, Greece, 2012.
- Organisation co-chair and program committee of workshop "1st Mining Humanistic Data", Halkidiki, Greece, 2012.
- Program committee of conference "Artificial Intelligence Applications and Innovations", Halkidiki, Greece, 2012.
- Program committee of Special Track on Database Theory, Technology, and Applications of the ACM Symposium on Applied Computing, Trento, Italy, 2012.
- Program committee of conference "Engineering Applications of Neural Networks", Ionian University, Corfu, September 2011.
- Program committee of conference "Artificial Intelligence Applications and Innovations", Ionian University, Corfu, September 2011.
- Organising committee of conference "Privacy in Statistical Databases", Ionian University, Kerkyra, September 2010.
- Organising committee of conference "International Conference on Engineering Applications of Neural Networks", Aristotle University of Thessaloniki, Thessaloniki, August 2007.
- Organising committee of conference "East-European Conference on Advances in Databases and Information Systems", Aristotle University of Thessaloniki, Thessaloniki, September 2006.
- Organising committee of symposium "Hellenic Data Management Symposium", Aristotle University of Thessaloniki, Thessaloniki, September 2006.
- Member of the scientific committee of Balkan Olympiad in Informatics 2006, Cyprus.
- Leader of Greek informatics delegation in the 17th International Olympiad in Informatics 2005, Nowy Sacz, Poland.
- Member of the scientific committee of Balkan Olympiad in Informatics 2005, Rhodos.
- Deputy leader of Greek informatics delegation in the Balkan Olympiad in Informatics 2004, Plovdiv, Bulgaria.
- Organising committee of conference "5th WDAS", Aristotle University of Thessaloniki, Thessaloniki, June 2003.
- Organising committee of conference "9o Panhellenic Conference in Informatics", Univeristy of

Macedonia, Thessaloniki, November 2003.
- Deputy leader of Greek informatics delegation in the Balkan Olympiad in Informatics 2003, Iasi, Romania.
- Sailing (standard and racing degrees), member of the [GRE1364](GRE1364) racing crew
  - [1st place of the Ionian Region Championship in ORC Club category for 2011](link) ([cached printscreen](link))
  - [1st place of the Ionian Region Championship in ORC Club category for 2012](link) ([cached printscreen](link))
  - 1st place of the Corfu Sailing Club Championship in ORC Club category for 2012
  - [2nd place of the Ionian Region Championship in ORC Club category for 2013](link) ([cached printscreen](link))
  - [2nd place of the Ionian Region Championship in ORC Club category for 2015](link) ([cached printscreen](link))
  - [3rd place of the Ionian Region Championship in ORC Club category for 2017](link) ([cached printscreen](link))
- Member of the [Corfu Volunteering Network](link).
- Co-founder and managing director (2013-2019) of [CWA p.c.](link)

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Ioannis Karydis
July 1st 2019

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