# Ioannis Katakis

Full Curriculum Vitae

(Compiled: June 9, 2025)

## Short Bio

Dr Ioannis Katakis is a Professor, co-founder and co-director of the Artificial Intelligence Laboratory (ailab.unic.ac.cy) at the Computer Science Department of the University of Nicosia and Academic Coordinator of the MSc in Data Science. He served multiple universities as a lecturer and a senior researcher. Dr Katakis was included in the J. Ioannides' (Stanford University) list of top young Greek scientists based on the impact of their work. His research has been cited more than 10,000 times by the scientific community. He published more than 70 papers in international conferences and scientific journals, organized workshops and special issues. Dr Katakis has extensive experience in European research projects where he participated as a Principal Investigator and Task Leader. His research interests include Machine Learning, Deep Learning, Sentiment Analysis, Urban Data and Smart Cities, Conversational Agents, Social Network Analysis, AI for Health, and Computational Social Science.

## Personal Information

### Contact

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Web Page www.katakis.eu — www.unic.ac.cy/ailab

Social Web

G Scholar http://goo.gl/5Dn0Kf DBLP Record http://goo.gl/QRqM20

LinkedIn http://gr.linkedin.com/in/katak/

## Ioannis Katakis - Short CV

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Research Data Science, Machine Learning, Computational Social Science, Conversational Interests Agents, Dialogue Systems, Smart Cities, Social Networks, Deep Learning, Natural Language Processing, Data Streams, Multi-Label Learning, Sentiment Analysis,

Opinion Mining.

**Education** PhD in Machine Learning for Automated Text Classification, Aristotle University.

**Publications** More than 70 published articles (ICDE, CIKM, ECML, ECAI, TKDE, KAIS, UMAP).

**Leadership** Academic Coordinator, MSc in Data Science (University of Nicosia), Director of the Artificial Intelligence Lab (University of Nicosia)

**Awards** Included in the top-45 young Greek Scientists under the age of 45, published in **Distinctions** Kathimerini newspaper by John Ioannidis (Stanford University)

Citations Google Scholar reports 10000 citations with h-index=26

**Research** Principal Investigator, Quality Assurance Coordinator and Senior Researcher in **Projects**, EU-Funded Projects (ALAMEDA, EUNOMIA, VAVEL, INSIGHT) ● Author and **Funding** coordinator of grant proposals (FP7, H2020).

**Innovation** Co-Inventor of DidaxTo and Niosto: Tools for Sentiment Analysis on Text **Entrepreneurship** 

**Consultancy** Consulting companies and startups • Member of the committee responsible for the National Strategy for Artificial Intelligence in Cyprus • European Food Safety Authority - advisor on Machine Learning / NLP topics

Teaching 15 Years of Teaching Experience (More than 15 different courses) ● Extensive Experience in Distance Learning ● Set-up and Coordination of the MSc in Data Science (UNIC), Co-design of the BSc in Data Science (UNIC)

**Students** Supervised more than 30 Theses (MSc/BSc). 3 PhD students.

Editor Regular Area Editor in 2 Journals. Guest Editor in 5 Special Issues.

Chair Demo and Poster Chair at DEBS 2016 ● Organizer of 4 workshops (at ICML, KDD, ECML) ● Discovery Challenge Chair at ECML, ● Sponsors Chair, ICWE 2023

**Programme** Served the Program Committee of more than 30 conferences (notably: ECML/PKDD, **Committee** IJCAI, AAAI).

**Reviewer** Contributed reviews of more than 70 articles for 30 journals (notably: ACM TPAMI, Springer DAMI, ACM Comp Surveys, IEEE TKDE, IEEE TKDD, ACM TWEB)

## Work Experience

- 2023-Now Full Professor, co-Director of the Artificial Intelligence Lab, Academic Coordinator of the MSc in Data Science (Distance Learning), University of Nicosia, Department of Computer Science, Duration: 1 Semester, Research: Conversational Agents, Language Models, Teaching: Machine Learning and Data Mining II, Web and Social Data Mining
- 2017-2023 Associate Professor, co-Director of the Artificial Intelligence Lab, Academic Coordinator of the MSc in Data Science (Distance Learning), University of Nicosia, Department of Computer Science, <u>Duration</u>: 12 Semesters, <u>Research</u>: Social and Web Mining, Mining Urban Data, <u>Teaching</u>: Data Mining, Programming Principles II, Software Engineering
- 2013-Now **Senior Researcher, Project Manager**, National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, <u>Duration:</u> 6 Semesters, <u>Research:</u> Social and Web Mining, Mining Urban Data, <u>Projects:</u> Quality Assurance Coordinator of 2 EU projects (FP7 and H2020) dealing with Urban Data
- 2015-2016 **Senior Researcher**, Athens University of Economics and Business, Department of Informatics, <u>Duration:</u> 1 Semester, <u>Research:</u> NGHCS Creating the Next-Generation Mobile Human-Centered Systems, Influence Maximization in Social Networks
- 2014-2015 **Adjunct Faculty**, Hellenic Open University, School of Science and Technology, <a href="Duration: 1">Duration: 1</a> Semester, <a href="Teaching: Supervising Master Theses">Teaching: Supervising Master Theses</a>, <a href="Research: Research: Learning from Educational Data">Research: Learning from Educational Data</a>
- 2012-2016 **Adjunct Faculty**, Open University of Cyprus, Faculty of Pure and Applied Sciences, <a href="Duration: 4">Duration: 4</a> Semesters, <a href="Teaching: i) Intelligent Systems">Teaching: i) Intelligent Systems</a>, <a href="iii">ii</a>) Data Mining, <a href="iii">iii</a>) Web and Social Media Analysis, <a href="Research: Knowledge Discovery from Opinion Data">Research: Knowledge Discovery from Opinion Data</a>
- 2012-2013 Senior Researcher, Cyprus University of Technology, Department of Communication and Internet Studies, <u>Duration:</u> 2 Semesters, <u>Teaching:</u> i) Artificial Intelligence, ii) Information and Knowledge Management, <u>Research:</u> Social Recommendations in Voting Advice Applications
- 2011-2012 **Visiting Lecturer**, *University of Cyprus*, *Department of Computer Science*, <a href="Duration: 3">Duration:</a> 3 Semesters, <a href="Teaching: i">Teaching: i</a>) Machine Learning and Data Mining, ii) Programming for Problem Solving, iii) Programming for Engineers, iv) Introduction to Computer Science, <a href="Research: Data Mining">Research: Data Mining on Software Resources</a>
- 2009-2010 **Adjunct Lecturer**, Aristotle University of Thessaloniki, Department of Informatics, <u>Duration:</u> 1 Semester, <u>Teaching:</u> i) Basic Programming Principles, ii) Object Oriented Programming, <u>Research:</u> Multi-Label Learning

## Education

- 2005-2009 **PhD**, Machine Learning for Automated Text Classification, Aristotle University of Thessaloniki, Department of Informatics
  Supervisor: Joannis Vlahavas
- 2005-2007 MSc, Information Systems, Aristotle University of Thessaloniki, Department of Informatics, Thesis Title: "A Scientific Article Recommendation System using Association Rules and Collaborative Filtering"
  Supervisor: Nick Bassiliades
- 2000-2004 **BSc**, *Computer Science*, Aristotle University of Thessaloniki, Department of Informatics, Thesis Title: "Multiple Classifier Systems" Supervisor: Ioannis Vlahavas

## Grants, Funding and Fellowships

- 2021 European Commision, H2020, <u>Title:</u> ALAMEDA: Bridging the Early Diagnosis and Treatment Gap of Brain Diseases via Smart, Connected, Proactive and Evidence-based Technological Interventions, <u>Budget:</u> 6M Euros, <u>Role:</u> UNIC's Principal Investigator
- 2020 Seed Grant, University of Nicosia, <u>Title:</u> An AI Enabled Framework to Boost Autonomicity and Decentralized Data Routing for Drone Swarms, <u>Budget:</u> 20K Euros, <u>Role:</u> Co-Principal Investigator. <u>Principal Investigator:</u> Demetris Trihinas http://ailab.unic.ac.cy
- 2015 European Commission, H2020, <u>Title:</u> VaVeL: Variety, Veracity, VaLue: Handling the Multiplicity of Urban Sensors, <u>Budget:</u> 4M Euros, <u>Role:</u> Main Organizer and Co-Author of the Proposal. <u>Principal Investigator:</u> Dimitrios Gunopulos www.vavel-project.eu
- 2013 ERCIM Alain Bensoussan Fellowship, Post-Doc Fellowship, European Commission (awarded the fellowship but didn't enroll with the program)
- 2008 Scholarship by the Hellenic Artificial Intelligence for presenting paper at the "European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, 15 19 September 2008, Antwerp, Belgium (ECML/PKDD 2008)" and "18th European Conference on Artificial Intelligence", Patras, Greece, 21-25 July, 2008 (ECAI 2008)

## Awards - Distinctions

- 2018 Included in the top 45 greek scientists list under the age of 45. Published in Kathimerini newspaper on Oct 1, 2018, by John P. A. Ioannids (Stanford University)
- 2008 3rd Innovative Business Plan Award at the competition "Innovative Ideas in Central Macedonia", organized by Thessaloniki Technology Park
- 2008 3d place at the Automated Tag Suggestion in Social Networks Discovery Challenge, European Conference on Machine Learning (ECML/PKDD)

## Research Interests

- Data Science
- Web and Text Mining
- Mining Social Networks
- Data Stream Mining
- Sentiment Analysis
- Conversational Agents

- Machine Learning
- Learning from Urban Data
- User Adaptation
- Multi-Label Learning
- User Personalization
- Natural Language Processing

## Research Projects Experience

- 2021-Now **Principal Investigator on behalf of the University of Nicosia**, ALAMEDA: Bridging the Early Diagnosis and Treatment Gap of Brain Diseases via Smart, Connected, Proactive and Evidence-based Technological Interventions, EC, H2020
- 2019-Now **Task Leader**, User-oriented, secure, trustful & decentralised social media, EU H2020 https://trilateralresearch.co.uk/project/eunomia/
- 2017-2018 **Senior Researcher**, Centre for STEAM Education Research, Science, EU H2020 http://cysrc.eu/
- 2015-2018 Quality Assurance Coordinator, Work Package Leader, VaVeL: Variety, Veracity, VaLue: Handling the Multiplicity of Urban Sensors, EU H2020 Project www.vavel-project.eu
  - 2016 **Senior Researcher**, NGHCS Creating the Next-Generation Mobile Human-Centered Systems, ERC Grant, European Commission http://www.cs.aueb.gr/~vana/NGHCS/
- 2013-2015 Quality Assurance Coordinator, Work Package Leader, INSIGHT: Intelligent Synthesis and Real-Time Response Using Massive Streaming of Heterogeneous Data, EU FP7 Project

  www.insight-ict.eu
- 2012-2013 **Post-Doc Researcher**, Choose4Greece & Choose4Cyprus Voting Advice Applications

  www.preferencematcher.org, www.choose4gree.org, www.choose4cyprus.org
  - 2009 **Researcher**, Multi-label Classification in Domains with Large Number of Labels, German Academic Exchange Service and Greek State Scholarship Foundation (IKYDA)
- 2005-2008 **Researcher**, Development of an Intelligent System for the management of Semantic Web Services, Greek R&D Secretariat

## Academic Administrative Experience

- 2020-Now Coordinator of the MSc in Data Science, Computer Science Department, University of Nicosia, Handling Applications, Coordinating with Marketing, Admissions, Distance Learning Unit, Faculty, Industrial Collaborations, Promotion of the Program, Communication with students, maintaining the MSc Data Science community, and many more., https://register.unic.ac.cy/msc-data-science-dl/
- 2017-Now **Co-Founder and Co-Director**, *Artificial Intelligence Laboratory*, Computer Science Department, University of Nicosia, http://ailab.unic.ac.cy

  Coordinating faculty, students, maintaining the website, industrial collaborations, coordination of research grant proposals.
- 2017-Now **Seminars, Webinars, Talks**, Provided seminars and webinars to students and to the general public for promoting the programs offered by the computer science department (over 7 seminars/webinars in total).
  - 2019 Scientific Committee Member, Pancyprian Robotics Competition (ROBOTEX 2019), June 29-30, 2019, https://www.robotex.org.cy/en/
  - 2017 **Coordinator of the Evaluation Committee**, Logipaignion 10th Annual Game Development Competition, University of Nicosia, http://logipaignion.org.cy/
- 2017-Now **Quality Assurance Coordinator**, Department of Computer Science, University of Nicosia

## 5 Indicative Recent Publications

- Pantelis Agathangelou, Ioannis Katakis, Panagiotis Kasnesis: Word- and Sentence-Level Representations for Implicit Aspect Extraction. IEEE Trans. Comput. Soc. Syst. 11(5): 5935-5948, 2024.
- Constantinos Romantzis, Alexandros Karakasidis, Evangelos Mathioudis, Ioannis Katakis, Pantelis Agathangelou, Jahna Otterbacher: Subjectivity, Polarity and the Aspect of Time in the Evolution of Crowd-Sourced Biographies. ICWE 2024: 281-295
- A. Kounoudes, G. Kapitsaki, I. Katakis, "Enhancing user awareness on inferences obtained from fitness trackers data", User Modeling and User-Adapted Interaction, Springer, 2023.
- C. Chira, E. Mathioudis, C. Michailidou, P. Agathangelou, G. Christodoulou, I. Katakis, E. Kontopoulos and K. Avgerinakis, "An Affective Multi-Modal Conversational Agent for Non-Intrusive Data Collection from Patients with Brain Diseases", CONVERSATIONS 2022, University of Amsterdam, the Netherlands, November 22-23, 2022.
- Saravanou A., Katakis I., Valkanas G., Gunopulos D. "Detection and Delineation of Events andSub-Events in Social Networks", 34th International Conference on Data Engineering, Paris France, April 16th-19th, 2018.

## Teaching Experience

## Design of Academic Programs

PD1. **MSc in Data Science** (2017-2022), University of Nicosia. Pathway design, organization of faculty meetings, curricula development, study guides development, preparation of the application to the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA), recruitment of adjunct faculty members, coordination of the defense/evaluation of the program to the CYQAA and the External Evaluation Committee, development of the response to the CYQAA.

## Coordination of Academic Programs

AC1. **MSc in Data Science** (2020-now), responsible for the smooth operation and promotion of the program. Academic Coordination of approximately 100 students.

## Graduate Courses (Principal Instructor)

- TM5. "Machine Learning", University of Nicosia, 4 semesters. (2021, 2022)
- TM4. "Web and Social Media Analytics", Open University of Cyprus, 1 Semester (2016)
- TM3. "Data Mining", Open University of Cyprus, 1 Semester (2015)
- TM2. "Intelligent Systems", Open University of Cyprus, 2 semesters (2013, 2014)
- TM1. "Data Mining and Machine Learning", University of Cyprus, 1 Semester (2011)

## Undergraduate Courses (Principal Instructor)

- TB13. "Machine Learning and Data Mining II", department of Computer Science, University of Nicosia, 1 semester (2022-Now)
- TB12. "Machine Learning and Data Mining I", department of Computer Science, University of Nicosia, 1 semester (2022-Now)
- TB11. "Software Engineering", department of Computer Science, University of Nicosia, 3 Semesters (2018, 2019, 2020)
- TB10. "Data Mining", department of Computer Science, University of Nicosia, 4 Semester (2017, 2018, 2019, 2020)
- TB9. "Programming Principles 2", department of Computer Science, University of Nicosia, 7 Semesters (2017, 2018, 2019, 2020)
- TB8. "Artificial Intelligence", department of Communication and Internet Studies, Cyprus University of Technology, 1 Semester (2013)
- TB7. "Information and Knowledge Management", department of Communication and Internet Studies, Cyprus University of Technology, 1 Semester (2012)
- TB6. "Artificial Intelligence", department of Computer Science, University of Cyprus, 1 Semester (2012). Students of this course participated in the AAAI, Artificial Intelligence Video Competition and qualified to the finals: http://www.aaaivideos.org/2012/
- TB5. "Introduction to Programming for Engineers", department of Computer Science, University of Cyprus, 1 Semester (2012)
- TB4. "Programming Methods for Problem Solving", department of Computer Science, University of Cyprus, 2 Semesters (2011, 2012)

- TB3. "Introduction to Computer Science", department of Computer Science, University of Cyprus, as a visiting Lecturer, 1 Semester (2011)
- TB2. "Basic Programming Principles", department of Informatics, Aristotle University of Thessaloniki, Responsible for the laboratory-part of the course, 1 Semester (2010)
- TB1. "Object Oriented Programming", department of informatics, Aristotle university, Responsible for the laboratory-part of the course, 1 Semester (2010)

## Other Courses (Principal Instructor)

TO1. "Electronic Presentations in Teaching", to academic staff of Aristotle University of Thessaloniki, 2 Semesters (2007,2008)

## PhD Students

- PS2. Panagiota Koutla, "Conversational Agents", University of Nicosia, 2022-Now
- PS1. Pantelis Agathangelou, "Mining User Generated Content", University of Nicosia, 2017-Now

## Theses Supervision

- TS15. Philipp Beer, Efficient Algorithms for Time Series Retrieval, MSc Thesis, University of Nicosia, 2022.
- TS14. Evangelos Mathioudis, Ensemble of Reinforcement Learning Algorithms for Intelligent Traffic Signal Management, University of Nocosia, 2022,
- TS13. Giorgio Hadjimichael, "The Correlation Between Individual Talent and Team Achievement: A Data-Driven Approach", BSc Thesis, University of Nicosia, 2020
- TS12. Tinotenda Mhlanga, "Forecasting Methods for Real Estate Time Series Analysis", BSc Thesis, University of Nicosia, 2020
- TS11. Mariana Kyriacou, "Mining Blockchain Transactions", BSc Thesis, University of Nicosia, 2019
- TS10. Savvas Savva, "Learning from real-time trajectories", BSc Thesis, University of Nicosia, 2019
- TS9. Christos Chasapis, "Text Classification with Deep Learning", Bsc Thesis, University of Nicosia, 2019
- TS8. Grigorios Kokozidis, "Opinion Linking", BSc thesis, University of Nicosia, 2019
- TS7. Andreas Kalogeropoulos, "Statistical Analysis of the Dacus Database of the Greek National Project Against the Olive Fruit Fly", MSc Thesis, Open University of Cyprus, 2016
- TS6. Vaios Sintsirmas, "A Hybrid Multi-Criteria Recommendation System for News Articles", Open University of Cyprus, 2016
- TS5. Sakkalis Konstantinos, "Learning from Educational Data", MSc Thesis, Hellenic Open University, 2014
- TS4. Nicolas Hadjinicolaou, "Online Algorithms for Social Recommendations in Voting Advice Applications", MSc Thesis, Open University of Cyprus, 2014
- TS3. Theodora Koutsou, "Sentiment Analysis for Political Figures in Micro-Blogs", MSc Thesis, Open University of Cyprus, 2013

- TS2. Pandelis Agathangellou, "Mining Domain-Specific Lexicons of Opinion Words", MSc Thesis, Open University of Cyprus, 2012
- TS1. Vassiliki Marinou, "A Comparison Study of Open Source Text Mining Software", MSc Thesis, Open University of Cyprus, 2012

## Theses Co-Supervision

- TC11. Theodosis Theodosiou, "Assessment of Wavelet Functions for Privacy Preserving Record Linkage", MSc Thesis, Hellenic Open University, (Main Supervisor: Professor Vassilios Verykios), 2016
- TC10. Maria Tantoula, "Building Student Models for Personalized Learning", MSc Thesis, Hellenic Open University, (Main Supervisor: Professor Vassilios Verykios), 2015
- TC9. Ioannis Koutoulakis, "Learning Patterns for Extracting Domain Specific Opinion Words", BSc Thesis, National and Kapodistrian University of Athens, (Main Supervisor: Professor Dimitrios Gunopulos), 2015
- TC8. Charalambos Charalambous, "An Analysis of the Tagging Assignments in the Google Code Repository", BSc Thesis, Computer Science department, University of Cyprus, (Main Supervisor: Lecturer George Pallis), 2012
- TC7. Onisiforos Onoufriou, "Intelligent Retrieval of Software Resources in Cloud Infastructures", BSc Thesis, Computer Science department, University of Cyprus, (Main Supervisor: Lecturer George Pallis), 2012
- TC6. Dimitris Savva, "User Context Extraction", BSc Thesis, Computer Science department, University of Cyprus, (Main Supervisor: Professor Marios D. Dikaiakos), 2011
- TC5. Eleni Siona, "Extension of Recommendation System", Department of Informatics, BSc Thesis, Aristotle University, (Main Supervisor: Professor Ioannis Vlahavas), 2010
- TC4. Georgios Fesalidis, "A Recommendation System for Scientific Articles", BSc Thesis, Department of Informatics, Aristotle University, (Main Supervisor: Lecturer Grigorios Tsoumakas), 2009
- TC3. Sophia Maleza, "Development of an Email Classifier", BSc Thesis, Department of Informatics, Aristotle University (Main Supervisor: Professor Ioannis Vlahavas), 2007
- TC2. Georgia Avramidi, "Development and Training of a Hierarchy of Classifiers for Text Categorization", BSc Thesis, Department of Informatics, Aristotle University (Main Supervisor: Professor Ioannis Vlahavas)
- TC1. Evangelos Banos, "A Personalized System for Reading News and Scientific Articles from the World Wide Web", MSC Thesis, Department of Informatics, Aristotle University (Main Supervisor: Associate Professor, Nick Bassiliades), 2006

## BSc Thesis Evaluation Committee Member

BE4. Basel Sabbaba, "An Application to Monitor and Detect Anomaly Behavior on a System Using SYSDIG (Supervisor: Ioanna Dionysiou)

- BE3. Hanna Sabbaba, "A classifier to Distinguish between Cypriot Greek and Standard Modern Greek", University of Nicosia (Supervisor: Athena Stassopoulou), 2018.
- BE2. Chris Peppos, "Document Categorization using Naive Bayes' Classifier", University of Nicosia, (Supervisor: Athena Stassopoulou), 2018.
- BE1. Thomas Demosthenous, "Document Classification Based on Language using N-Grams", University of Nicosia, (Supervisor: Athena Stassopoulou), 2018.

## PhD Thesis Evaluation Committee Member

- PE4. Demetris Paschalides, "Polarization in Social Media", Supervisor: M. Dikaiakos
- PE3. Antonia Saravanou, "Anomaly Detection on Temporal Data with Applications to Social Networks and Healthcare", National and Kapodistrian University of Athens, Supervisor, Prof. Dimitrios Gunopulos, 2020.
- PE2. Maryam Sabzevari, "Ensemble Learning in the Presence of Noise", Universidad Autonoma de Madrid, Supervisor: Dr. Gonzalo Martinez-Munoz, Dr. Alberto Suarez, 2019.
- PE1. Hariton Efstathiades, "Online Social Networks Analysis: Extracting Insights and Evolution Trends", University of Cyprus, Main Supervisor: M. Dikaiakos, G. Pallis, 2018.

## Scientific Service and Contribution

#### Editor in International Journals

- ED3. Smart Cities Journal, member of the **Editorial Board** of the Smart Data Section, MDPI (2020 today)
- ED2. Online Social Networks and Media, Elsevier, **Editor** (2019 2024, handled more than **15** papers),
- ED1. Information Systems, Elsevier, **Area Editor** in Mining Social and Urban Data (2016 today, handled more than **70** papers),  $\underline{\mathsf{IMPACT}\ \mathsf{FACTOR}} = 3.18$

## Conference/Workshop Organizer or Chair

- CH9. Area Chair, ECML PKDD 2024, European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, September 9-13, 2024, Vilnius.
- CH8. 24rd International Conference on Web Engineering, Tampere, Finland | June 6-9, 2024, Sponsor Chair.
- CH7. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, ECML/PKDD 2022, Discovery Challenge Chair
- CH6. SMAP 2019, 4th International Workshop On Semantic And Social Media Adaptation And Personalization 8-10 June 2019 / Larnaca, Cyprus Collocated with UMAP 2019
- CH5. MUD 3, 2nd International Workshop on Mining Urban Data, co-located with ACM Conference on Knowledge Discovery and Data Mining, with G. Anrineko (IAIS Fraunhofer), D.

- Gunopulos (UoA), V. Kalogeraki (AUEB), T. Liebig (TU Dortmund), J. Marecek (IBM), K. Morik (TU Dortmund).
- CH4. DEBS 2016, Distributed Event Based Systems, 2016, Irvine, CA, June 20 June 25, 2016. (Demo & Posters Chair) with Nesime Tatbul (MIT).
- CH3. MUD 2, 2nd International Workshop on Mining Urban Data, co-located with International Conference on Machine Learning (ICML 2015), 06-11 July 2015, Lille, France. (Main Organizer) with François Schnitzler (Technion), Thomas Liebig (TU Dortmund University), Gennady Andrienko (Fraunhofer IAIS and City University London), Dimitrios Gunopulos (National and Kapodistrian University of Athens), Katharina Morik (TU Dortmund University) Shie Mannor (Technion).
- CH2. MUD, Mining Urban Data workshop at EDBT/ICDT 2014 (International Conference on Extending Database Technology, International Conference on Database Theory), Athens, March 24-28, 2014. (Main Organizer) with Gennady Andrienko, (Fraunhofer IAIS and City University London), Dimitrios Gunopulos (National and Kapodistrian University of Athens), Vana Kalogeraki (Athens University of Economics and Business), Pedro Jose Marron (Universitat Duisburg-Essen), Katharina Morik (TU Dortmund University) and Olivier Verscheure (IBM Research).
- CH1. COPEM 2013, Solving Complex Machine Learning Problems with Ensemble Methods workshop at ECML/PKDD 2013 (European Conference on Machine Learning Principles and Practice of Knowledge Discovery in Data Bases. (Main Organizer), with Daniel Hernández-Lobato (Universidad Autónoma de Madrid), Gonzalo Martínez-Muñoz (Universidad Autónoma de Madrid), Ioannis Partalas (University of Grenoble).

## Guest Editor in Scientific Journals

- GE5. Misinformation on the Web, Special Issue in the Journal Information Systems, Elsevier. With Karl Aberer (EPFL), Quoc Viet Hung (Henry) Nguyen (Griffith University), Hongzhi Yin (The University of Queensland).
- GE4. Mining Actionable Insights from Social Networks, Special Issue in Information Systems, Elsevier. With Ebrahim Bagheri (Ryerson University), Faezeh Ensan (Ferdowsi University of Mashhad) and Zeinab Noorian (Ryerson University), 2018-2019
- GE3. Data Mining for Smart Cities, Special Section in Data Mining and Knowledge Discovery Journal, Springer. With Katharina Morik (TU Dortmund), Marta Gonzalez (MIT), Fosca Ganniotti (ISTI-CNR, 2017.
- GE2. Mining Urban Data, Special Issue in Journal of Information Systems, 2015-2016. <u>I was the</u> Managing Guest Editor for this Special Issue, handling 44 submissions.
- GE1. Solving Complex Machine Learning Problems with Ensemble Methods, Special Issue in Elsevier Neurocomputing Jounal, 2014

#### Evaluator in Research Project Proposals (Fund Applications)

- RP3. European commission, Horizon Europe, 2022
- RP2. Vienna Science and Technology Fund WWTF, 2018
- RP1. National Science Center, Poland, 2015

## Program Committee Memberships

- PC60. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases ECML PKDD, Porto, Portogual, AREA CHAIR, 2025
- PC59. The 39th Annual AAAI (AAAI 2025) Conference on Artificial Intelligence, FEBRUARY 25 MARCH 4, 2025 | PHILADELPHIA, PENNSYLVANIA, USA
- PC58. The 10th International Conference on Behavioural and Social Computing, Larnaca, Cyprus, 30 October 1 November, 2023.
- PC57. OSNeHM, the First International workshop on Online Social Networks in the Human-centric Metaverse, co-located with The Web Conference 2023 (April 30th May 4th, 2023, Austin, TX, USA).
- PC56. 7th International Conference on Internet Science (INSCI) 2023, 13-15 September 2023, Limassol, Cyprus
- PC55. AAAI 2023, The 37th AAAI conference on Artificial Intelligence, February 7-14, 2023, Washington, DC, USA.
- PC54. IEEE ISC2 2022 8th IEEE International Smart Cities Conference 2022, 26-29 September 2022, Aliathon Resort, Paphos, Cyprus
- PC53. Multi-Label Learning: Current Trends and Open Challenges workshop at ECML/PKDD, 2022. Workshop website: https://mll2022.csd.auth.gr/
- PC52. ECML/PKDD 2022, European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, ECML/PKDD 2022, Grenoble, France.
- PC51. ISIoT 2022 (4th International Workshop on Intelligent Systems for the Internet of Things), Marina Del Rey, LA, California May 30 to June 1, 2022 colocated with DCOSS 2022 (The 18th International Conference on Distributed Computing in Sensor Systems)
- PC50. AAAI 2022, 36th AAAI Conference on Artficial Intelligence, Vancouver, BC, Canada, February 22 March 1, 2022.
- PC49. ASONAM 2021, IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM) Multidisciplinary Track, 2021, 08-11 November 2021, The Hague, Netherlands
- PC48. AAAI 2021, 35th AAAI Conference on Artificial Intelligence, A Virtual Conference, February 2-9, 2021
- PC47. DASFAA 2021, The 26th International Conference on Database Systems for Advanced Applications, Taipei, Taiwan, April 11-14, 2021.
- PC46. IJCAI 2020, International Joint Conference on Artificial Intelligence Pacific Rim International Conference on Artificial Intelligence, July 11-17, 2020, Yokohama, Japan.
- PC45. DS 2020, 23rd International Conference on Discovery Science, 19-21 October 2020, Thessaloniki, Greece.
- PC44. SETN 2020, 11th Hellenic Conference on Artificial Intelligence (SETN 2020), Athens, Greece,2-4 of September, 2020.
- PC43. 2nd International Workshop on Intelligent Systems for the Internet of Things, Marina Del Rey, Los Angeles, May 25-27, 2020.

- PC42. IJCAI 2019, the 28th International Joint Conference on Artificial Intelligence, August 10-16, 2019, Macao, China.
- PC41. AAAI 2019, Thirty-Third AAAI Conference on Artificial Intelligence, January 27-February 1, 2019, Hilton Hawaiian Village, Honolulu, Hawaii, USA
- PC40. Web Intelligence 2019, IEEE/WIC/ACM International Conference on Web Intelligence, 14-17 of October 2019, Thessaloniki, Greece.
- PC39. Decentralized 2019, Academic Track, Athens, 30 Oct 1 Nov, 2019
- PC38. ISIoT 2019, 1st International Workshop on Intelligent Systems for the Internet of Things, Santorini Island, Greece, May 29-31, 2019, co-located with DCOSS 2019
- PC37. IJCAI 2018, the 27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence, Stockholm, Sweden, July 13-19, 2018.
- PC36. SETN 2018, The 10th Hellenic Conference on Artificial Intelligence, July 9-15, 2018, Patras, Greece.
- PC35. ODBASE 2017, The 16th International Conference on Ontologies, Databases, and Applications of Semantics, 24-25 October 2017, Rhodes, Greece.
- PC34. ACML 2017, Asian Conference on Machine Learning 2017, Nov 15, 2017 Nov 17, 2017, Seoul, Korea
- PC33. CAp 2017, Conference sur l'Apprentissage Automatique (the annual meeting of the francophone Machine Learning community), Grenoble, France, 28-30 June, 2017.
- PC32. INSCI 2017, 4th International Conference on Internet Science, 8-10 November, 2017, Thessaloniki, Greece
- PC31. IJCAI 2016, International Joint Conference on Artificial Intelligence, Melbourne, August 19-25, 2017.
- PC30. ECML PKDD 2016, European Conference on Machine Learning and Principles and Practice of Knowledge Discovery, Riva del Garda, Italy, September 19-23, 2016.
- PC29. The Second International Workshop on Machine Learning, Optimization and Big Data, MOD 2016, An Interdisciplinary Workshop: Machine Learning, Optimization and Data Science without Borders, August 26-29, 2016 Volterra, Tuscany, Italy.
- PC28. IEEE DSAA' 2015, International Conference on Data Science and Advanced Analytics, 19-21 October 2015, Paris.
- PC27. SETN 2016, 9th Hellenic Conference on Artificial Intelligence, May 18-20, 2016, Thessaloniki, Greece.
- PC26. FEDCSIS 2015, Federated Conference on Computer Science and Information Systems, Lodz, Poland, September 13-16, 2015
- PC25. IJCAI 2015, International Joint Conference on Artificial Intelligence, Buenos Aires, 2015.
- PC24. ECML PKDD 2015, European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, 2015, Porto, Portogual
- PC23. International Workshop on Machine Learning, Optimization and Big Data, MOD 2015, An Interdisciplinary Workshop: Machine Learning, Optimization and Data Science without Borders, July 21-24, 2015 Taormina Sicily, Italy

- PC22. 15th International Conference on Web Information System Engineering (WISE 2014), Thessaloniki, Greece, 12-14, October 2014.
- PC21. 18th East-European Conference on Advances in Databases and Information Systems (ADBIS 2014) (PhD Track), Ohrid, September 7-10, 2014
- PC20. Federated Conference on Computer Science and Information Systems, Warsaw, Poland, 7-10, September, 2014.
- PC19. The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, ECML/PKDD 2014, September 15-19, 2014, Nancy, France.
- PC18. 8th ACM International Conference on Distributed Event-Based Systems, DEBS 2014, Mumbai, India, May 26-29, 2014.
- PC17. New Learning Frameworks and Models for Big Data, ICML 2014, June 25, Beijing, China
- PC16. Web-Scale Classification: Classifying Big Data from the Web, Workshop in ACM WSDM 2014 (Web Search and Data Mining), New York City, February 24-28, 2014).
- PC15. 21st European Conference on Artificial Intelligence (ECAI 2014), August 18-22, Prague, Czech Republic.
- PC14. 10th International Conference on Flexible Query Answering Systems, Special Session: FETOL 2013, Fusion and Ensemble Techniques for Online Learning On Data Streams, Granada, Spain, 18-20, 2013.
- PC13. Data Stream Classification and Big Data Analytics a Special Session co-located with the 8th Computer Recognition, Systems Conference (CORES 2013), Milkow, Poland May 27-29, 2013
- PC12. IP-VAA'12: Interdisciplinary Perspectives on Voting Advice Applications, Limassol, 22-24 November, 2012
- PC11. European Conference on Machine Learning and Principles and Practices on of Knowledge Discovery in Databases 2012 (ECML/PKDD 2012), Discovery Challenge Workshop on Large Scale Hierarchical Classification
- PC10. Workshop on Nonstationary Models of Pattern Recognition and Classifier Combinations under the framework of HAIS2012 (International Conference on Hybrid Artificial Intelligence Systems), Salamanca, Spain, in March of 2012
  - PC9. HaCDAIS 2011: The 2nd International Workshop on Handling Concept Drift in Adaptive Information Systems, Vancouver, Canada, December 10th, 2011 in conjunction with the 11th IEEE International Conference on Data Mining (IEEE ICDM 2011)
- PC8. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, (ECML PKDD 2011), Athens, Greece 5-9 Sep, 2011
- PC7. Twenty-second International Joint Conference on Artificial Intelligence, (July 16-22, 2011), IJCAI 2011, Barcelona, Catalonia (Spain)
- PC6. 6th IFIP Conference on Artificial Intelligence Applications and Innovations (AIAI 2010)
- PC5. International Workshop on Handling Concept Drift in Adaptive Information Systems: Importance, Challenges and Solutions (HACDAIS 2010)
- PC4. Second International Workshop on Learning from Multi-Label Data in conjunction with ICML/COLT 2010, June 25, 2010 Haifa, Israel (MLD10)

- PC3. Special Session on Machine Learning Methods for Data Streams, under the framework of the 10th International Conference on Intelligent Design and Applications, ISDA'10, November 29 December 1, 2010, Cairo, Egypt (MLMDS'2010)
- PC2. ECML/PKDD 2009 Workshop on Learning from Multi-Label Data (MLD09), September 7, 2009 Bled, Slovenia
- PC1. International Conference on Artificial Intelligence and Pattern Recognition, 7-1 July 2008, Orlando, FL, USA (AIPR 08)

#### Reviewer - Journals

In total I have evaluated **70** articles, in the following journals:

- RJ35. Transactions on Pattern Analysis and Machine Intelligence, IEEE (since 2013)
- RJ34. Data Mining and Knowledge Discovery, Springer (7 papers)(since 2013)
- RJ33. ACM Computing Surveys, ACM (since 2012)
- RJ32. Transactions on Knowledge and Data Engineering (TKDE), IEEE (4 papers) (since 2010)
- RJ31. Transactions on the Web, ACM (since 2011)
- RJ30. Journal of Artificial Intelligence Research (JAIR), AAAI Press (since 2013)
- RJ29. Pattern Recognition, Elsevier (since 2011)
- RJ28. World Wide Web Journal, Springer, (1 paper)(since 2021)
- RJ27. Transactions on Knowledge Discovery from Data (TKDD), ACM (3 papers) (since 2011)
- RJ26. Machine Learning Journal (ML), Springer (5 papers) (since 2010)
- RJ25. Journal of Machine Learning Research (JMLR), MIT press (since 2012)
- RJ24. Data and Knowledge Engineering (DKE), Elsevier (since 2011)
- RJ23. Internet Computing, IEEE (since 2011)
- RJ22. Knowledge and Information Systems (KAIS)(4 papers) (since 2014)
- RJ21. Information Systems (InfSys)(8 papers)(since 2016)
- RJ20. IEEE Transactions on Multi-Media (ToMM) (since 2014)
- RJ19. Artificial Intelligence Review (Springer) (since 2019)
- RJ18. IEEE Transactions on Neural Networks and Learning Systems (3 papers) (since 2012)
- RJ17. Computational Intelligence (CoIn), Wiley (4 papers) (since 2011)
- RJ16. Computational Intelligence and Neuroscience, Hindawi (since 2019)
- RJ15. Journal of Modern Greek Studies (since 2021)
- RJ14. Biometrika, Oxford University Press (since 2016)
- RJ13. Computing, Springer (6 papers) (since 2018)
- RJ12. Pervasive and Mobile Computing, Elsevier (since 2018)
- RJ11. Connection Science, Taylor and Francis (since 2008)
- RJ10. Journal of Intelligent Information Systems (JIIS), Springer (2 papers) (since 2010)
- RJ9. Pattern Recognition Letters, Elsevier (since 2011)

- RJ8. Neural Processing Letters, Springer (2 papers) (since 2009)
- RJ7. Evolving Systems, Springer (2 papers) (since 2010)
- RJ6. The Computer Journal, Oxford University Press (7 papers) (since 2008)
- RJ5. Int. Journal on Artificial Intelligence Tools, Springer (10 papers) (since 2007)
- RJ4. International Journal of Computer Mathematics, Taylor & Francis (since 2006)
- RJ3. Computers and Electrical Engineering, Elsevier (6 papers) (since 2011)
- RJ2. Pattern Analysis and Applications, Springer (since 2012)
- RJ1. Information, MDPI (2 papers)(since 2021)

#### Reviewer - Edited Volumes & Books

RB1. Advances in Networking Systems Architectures, Security, and Applications, Springer, 2016

## Reviewer - Conferences and Workshops

Conferences that I served the program committee are NOT included - see previous section

- RC16. IEEE International Conference on Data Mining (ICDM 2016), Barcelona, Spain, December 2016.
- RC15. 19th Panhellenic Conference on Informatics 2015 (PCI 2015), Athens, Greece, on 1st-3rd of October 2015.
- RC14. IEEE 20th International Conference on Web Services, June 27-July 2, 2013, Santa Clara Marriott, CA, USA (Center of Silicon Valley) (IEEE ICWS 2013)
- RC13. 24th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 212), November 7-9, 2012, Athens, Greece
- RC12. The 13th International Conference on Web Information System Engineering (WISE 2012), November 28th-30th, 2012, Paphos, Cyprus
- RC11. The Third International Conference on Social Informatics (SocInfo'11) 6 8 October, 2011, Singapore (2 papers)
- RC10. 36th International Conference on Very Large Data Bases, 13-17 Sept 2010, Singapore (VLDB 2010)
  - RC9. 19th European Conference on Artificial Intelligence, August 16-20, 2010, Lisbon, Portugal (ECAI 2010)
  - RC8. 2nd International Conference on Agents and Artificial Intelligence, 22-24 January, 2010, Valencia, Spain (ICAART 2010)
  - RC7. The International Conference on Advanced Data Mining and Applications Beijing August 17-19, 2009 (ADMA2009).
  - RC6. 13th Pacific-Asia Conference on Knowledge Discovery and Data Mining, 27-30 April 2009, Bangkok, Thailand, 13th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-09).
  - RC5. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD 2008)
  - RC4. ECAI 2008 Workshop on Mining Social Data, Patras, Greece, 2008 (MSODA 2008)

- RC3. Advanced Data Mining and Applications, Third International Conference, ADMA 2007, Harbin, China, August 6-8, 2007 (ADMA 2007)
- RC2. 3rd ADBIS Workshop on Data Mining and Knowledge Discovery 2 October 2007, Varna, Bulgaria, in conjunction with 11th East-European Conference on Advances in Databases and Information Systems , ADBIS'2007, (ADMKD2007)
- RC1. 21st Annual ACM Symposium on Applied Computing, Data Streams Track Dijon, France, April 23 -27, (SAC2006)

## Citations

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# Keynotes — Invited Talks

- IT5. I. Katakis, "Artificial Intelligence in Health: Opportunities and Challenges", 9th Scientific Conference of PA.SY.DY Nurses, Nursing and Midwifery: In the Continuously Evolving Field of Health Systems, 2024.
- IT4. I. Katakis, "Social Data analysis", Summer School, RAIS (Real-time Analytics for Internet of Sports), Marie Curie European Training Network, 12th May, 2021, Online.
- IT3. I. Katakis, "Data Science as an Interdisciplinary Tool: The impact ton Social Sciences", Greek Student Conference on Computer Science, Thessaloniki, Greece, April 2018
- IT2. I. Katakis, "Data Science as an Interdisciplinary Tool: The impact ton Social Sciences", at Technion Israel Institute of Technology, Haifa, Israel, March 2018
- IT1. I. Katakis, "Data Science as an Interdisciplinary Tool: The impact ton Social Sciences", at University of Nicosia, Nicosia, Cyprus, March 2018.

## **Publications**

#### Theses

- TH3. I. Katakis, "Machine Learning Methods for Automated Text Classification", PhD thesis, Department of Informatics, Aristotle University, 2009
- TH2. I. Katakis, "A Scientific Article Recommendation System using Association Rules and Collaborative Filtering", MSc Thesis, Department of Informatics, Aristotle University, 2007
- TH1. I. Katakis, "Multiple Classifier Systems", BSc Thesis, Department of Informatics, Aristotle University, 2004

#### Editorials - Prefaces

- ED7. Karl Aber, Ioannis Katakis, Quoc Viet Hung Nguyen, Hongzhi Yin, "Preface Special Issue on Misinformation on the Web", Information Systems, Elsevier, Volume 103, 2022, 101867, ISSN 0306-4379.
- ED6. Ebrahim Bagheri, Faezeh Ensan, Ioannis Katakis, Zeinab Noorian: Foreword to the special issue on mining actionable insights from social networks. Inf. Syst. 78: 162-163 (2018)
- ED5. G. Andrienko, D. Gunopulos, Y. Ioannidis, V. Kalogeraki, I. Katakis, K. Morik, O. Verscheure, "Mining Urban Data (part C)", preface on a Special Issue published by the Journal of Information Systems, Elsevier.
- ED4. G. Andrienko, D. Gunopulos, Y. Ioannidis, V. Kalogeraki, I. Katakis, K. Morik, O. Verscheure, "Mining Urban Data (part B)", preface on a Special Issue published by the Journal of Information Systems, Elsevier.
- ED3. Ioannis Katakis, François Schnitzler, Thomas Liebig: 2nd International Workshop on Mining Urban Data (Preface), Proceedings of the 2nd International Workshop on Mining Urban Data, co-located with International Conference on Machine Learning (ICML), Lille, France, 2015.
- ED2. I. Katakis, "Mining Urban Data (part A)", preface on the Special Issue published by the Journal of Information Systems, Elsevier.
- ED1. D. Hernandez-Lobato, I. Katakis, G. Martinez-Munoz, and I. Partalas, Special Issue on "Solving complex machine learning problems with ensemble methods"

## Journal Articles

- JA17. Pantelis Agathangelou, Ioannis Katakis, Panagiotis Kasnesis: Word- and Sentence-Level Representations for Implicit Aspect Extraction. IEEE Trans. Comput. Soc. Syst. 11(5): 5935-5948 (2024)
- JA16. Moysiadis, T., Koparanis, D., Liapis, K., Ganopoulou, M., Vrachiolias, G., Katakis, I., Moyssiadis, C., Vizirianakis, I. S., Angelis, L., Fokianos, K., & Kotsianidis, I. (2023). A personalized stepwise dynamic predictive algorithm of the time to first treatment in chronic lymphocytic leukemia. IScience, 26(9), 107591. https://doi.org/10.1016/j.isci. 2023.107591
- JA15. Triantafyllidis A, Segkouli S, Zygouris S, Michailidou C, Avgerinakis K, Fappa E, Vassiliades S, Bougea A, Papagiannakis N, Katakis I, Mathioudis E, Sorici A, Bajenaru L, Tageo V, Camonita F, Magga-Nteve C, Vrochidis S, Pedullà L, Brichetto G, Tsakanikas P, Votis K, Tzovaras D. Mobile App Interventions for Parkinson's Disease, Multiple Sclerosis and Stroke:

- A Systematic Literature Review. Sensors. 2023; 23(7):3396. https://doi.org/10.3390/s23073396
- JA14. A. Kounoudes, G. Kapitsaki, I. Katakis, "Enhancing user awareness on inferences obtained from fitness trackers data", User Modeling and User-Adapted Interaction, Springer, 2023.
- JA13. P. Agathangelou, I.Katakis, "Balancing between holistic and cumulative sentiment classification. Online Social Networks and Media", 29, 100199, 2022.
- JA12. Demetris Trihinas, Michalis Agathocleous, Karlen Avogian, Ioannis Katakis: FlockAI: A Testing Suite for ML-Driven Drone Applications. Future Internet 13(12): 317 (2021)
- JA11. Pantelis Agathangelou, Demetris Trihinas, Ioannis Katakis, "A Multi-Factor Analysis of Forecasting Methods: A Study on the M4 Competition.", Data 5(2): 41 (2020)
- JA10. P. Agathangelou, D. Trihinas, I. Katakis, "Correlation Analysis of Forecasting Methods: The Case of the M4 Competition", International Journal of Forecasting, Special Issue on the M4 Competition.
- JA9. Y. Papanikolaou, G. Tsoumakas, I. Katakis, "Hierarchical Partitioning of the Output Space in Multi-label Data", Data and Knowledge Engineering, Elsevier, 2018.
- JA8. I. Litou, V. Kalogeraki, I. Katakis, D. Gunopulos, "Efficient and Timely Misinformation Blocking under varying Cost Constraints", Online Social Networks and Media, Elsevier, 2017.
- JA7. P. Agathangelou, I. Katakis, I. Koutoulakis, F. Kokkoras, D. Gunopulos, "Learning Patterns for Discovering Domain Oriented Opinion Words", Knowledge and Information Systems, Springer, 2017.
- JA6. D. Kotsakos, P. Sakkos, I. Katakis, D. Gunopulos, "Language Agnostic Meme-Filtering for Hashtag-based Social Network Analysis", Social Network Analysis and Mining, Springer, 2016
- JA5. I. Katakis, N. Tsapatsoulis, F. Mendez, V. Triga, C. Djouvas, "Social Voting Advice Applications - Definitions, Challenges, Datasets and Evaluation", IEEE Transactions on Cybernetics, IEEE, 2013.
- JA4. G. Tsoumakas, I. Katakis, I. Vlahavas, "Random k-Labelsets for Multi-Label Classification", IEEE Transactions on Knowledge and Data Engineering, IEEE, 23(7), pp. 1079-1089, 2011
- JA3. I. Katakis, G. Tsoumakas, I. Vlahavas, "Tracking Recurring Contexts using Ensemble Classifiers: An Application to Email Filtering", Knowledge and Information Systems, 22(3), pp. 371-391, Springer, 2010
- JA2. I. Katakis, G. Tsoumakas, E. Banos, N. Bassiliades, I. Vlahavas, "An Adaptive Personalized News Dissemination System", Journal of Intelligent Information Systems, 32 (2), Springer, 2008
- JA1. G. Tsoumakas, I. Katakis, "Multi Label Classification: An Overview", International Journal of Data Warehousing and Mining, David Taniar (Ed.), Idea Group Publishing, 3(3), pp. 1-13, 2007

#### Magazine Articles

MA1. Sylvia Steenhoek, Gennady Andrienko, Natalia Andrienko, Ioannis Katakis, Antonia Saravanou, George Valkanas, Dimitrios Gunopulos, George Fuchs, and Hendrik Stange, "Storms

and Floods in Social Media: How the @INSIGHT project follows extreme #weather phenomena", Crisis Prevention, Beta Verlag und Marketinggesellschaft mbH, Issue 4 (2015), in German (Stürme und Hochwasser in Social Media: Wie das INSIGHT Projekt #extreme @Wetterphänomene beobachtet)

## **Book Chapters**

- BC4. J. Otterbacher, I. Katakis, P. Agathangelou, "Linguistic Bias in Crowdsourced Biographies: A Cross-lingual Examination", in Automatic Text Extraction, Natalia Vanetik and Marina Litvak (Editors), World Scientific, 2018.
- BC3. N. Panagiotou, I. Katakis, D. Gunopulos, "Detecting Events in Online Social Networks: Definitions, Trends and Challenges", in Solving Large Scale Learning Tasks: Challenges and Algorithms, S. Michaelis, N. Piatkowski, and M. Stolpe, Eds., Springer International Publishing, 2016.
- BC2. G. Tsoumakas, I. Katakis, I. Vlahavas, "Mining Multi-label Data", Data Mining and Knowledge Discovery Handbook, O. Maimon, L. Rokach (Ed.), Springer, 2nd edition, 2009
- BC1. I. Katakis, G. Tsoumakas, I. Vlahavas, "Email Mining: Emerging Techniques for Email Management", Web Data Management Practices: Emerging Techniques and Technologies, Athena Vakali, George Pallis (Ed.), Idea Group Publishing, pp. 219-240, 2006

## Articles in Conferences and Workshop Proceedings

- CA38. Alexia Dini Kounoudes, Georgia Kapitsaki and Ioannis Katakis: i-Right: Identifying and classifying GDPR user rights in fitness tracker and smart home privacy policies, WISE 2024, Doha, 2024.
- CA37. Constantinos Romantzis, Alexandros Karakasidis, Evangelos Mathioudis, Ioannis Katakis, Pantelis Agathangelou, Jahna Otterbacher: Subjectivity, Polarity and the Aspect of Time in the Evolution of Crowd-Sourced Biographies. ICWE 2024: 281-295
- CA36. Julie Durand, Athena Stassopoulou, Ioannis Katakis, "Adverse Drug Reaction Classification in Social Media: A Multi-label Approach", The 22nd IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology, October 26-29, 2023, Venice, Italy.
- CA35. T. Moysiadis, D. Koparanis, K. Liapis, M. Ganopoulou, G. Vrachiolias, I. Katakis, C. Moyssiadis, I. Vizirianakis, L. Angelis, K. Fokianos, I. Kotsianidis, "A novel personalized stepwise dynamic predictive algorithm in Chronic Lymphocytic Leukemia", 35th Panhellenic and 1st International Statistics Conference "Statistics in Health Sciences" (Poster Presentation) Athens, May, 25 28, 2023
- CA34. C. Chira, E. Mathioudis, C. Michailidou, P. Agathangelou, G. Christodoulou, I. Katakis, E. Kontopoulos and K. Avgerinakis, "An Affective Multi-Modal Conversational Agent for Non-Intrusive Data Collection from Patients with Brain Diseases", CONVERSATIONS 2022, University of Amsterdam, the Netherlands, November 22-23, 2022.
- CA33. Alexia Dini Kounoudes, Georgia M. Kapitsaki, Ioannis Katakis, Marios Milis: User-centred privacy inference detection for smart home devices. SmartWorld/SCALCOM/UIC/ATC/IOP/SCI 2021: 210-218
- CA32. C. Maga-Nteve, E. Kontopoulos, N. Tsolakis, P. Mitzias, I. Katakis, E. Mathioudis, K. Avgerinakis, G. Meditskos, A. Karakostas, S. Vrochidis and I. Kompatsiaris, "A Semantic Technologies Toolkit for Bridging Early Diagnosis and Treatment in Brain Diseases Report

- from the Ongoing EU-funded Research Project ALAMEDA", in proceedings of Metadata and Semantics Research Conference, Springer, Madrid, 2021
- CA31. P. Agathangelou, I. Katakis, "A Hybrid Deep Learning Network for Modelling Opinionated Content", the 34th ACM/SIGAPP Symposium On Applied Computing (**ACM SAC 2018**), Technical Track: Knowledge and Language Processing, Limassol, Cyprus, April 8-12, 2019.
- CA30. Saravanou A., Katakis I., Valkanas G., Gunopulos D. "Detection and Delineation of Events and Sub-Events in Social Networks", 34th International Conference on Data Engineering, Paris France, April 16th-19th, 2018. **ICDE 2018**
- CA29. A. Saravanou, I. Katakis, G. Valkanas, V. Kalogeraki, D. Gunopulos, "Revealing the Hidden Links in Content Networks: An Application to Event Discovery", **CIKM 2017**, International Conference on Information and Knowledge Management, 6-10 Nov 2017, Singapore.
- CA28. P. Agathangelou, I. Katakis, L. Rori, D. Gunopulos and B. Richards"Understanding Online Political Networks: The case of the far-right and far-left in Greece" in the proceedings of the 9th International Conference on Social Informatics (SocInfo 2017), Oxford, UK, 13-15 September 2017.
- CA27. A. Gal, D. Gunopulos, V. Kalogeraki, I. Katakis, N. Panagiotou, N. Rivetti and A. Senderovich, "REMI, Reusable Elements for Multi-Level Information Availability", in the proceedings of the 11th ACM International Conference on Distributed and Event-Based Systems (**DEBS 2017**), June 19-23, 2017, Barcelona, Spain.
- CA26. N. Panagiotou, N. Zygouras, I. Katakis, D. Gunopulos, N. Zacheilas, I. Boutsis, V. Kalogeraki, S. Lynch, B. O'Brien, "Intelligent Urban Data Monitoring for Smart Cities", European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (ECML/PKDD'16), Riva del Garda, Italy, September 19–23, 2016.
- CA25. N. Panagiotou, N. Zygouras I. Katakis, D. Gunopulos, N. Zacheilas, ..., G. Andrienko, "INSIGHT: Dynamic Traffic Management Using Heterogeneous Urban Data", European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (ECML/PKDD'16), Riva del Garda, Italy, September 19–23, 2016.
- CA24. N. Panagiotou, I. Katakis, D. Gunopulos, V. Kalogeraki, E. Daly, J. Yuan Yu, Brendan O' Brien, "Mining Hidden Constrained Streams in Practice: Informed Search in Dynamic Filter Spaces", The 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, **ASONAM 2016**, San Francisco, CA, USA, 18 21 August, 2016.
- CA23. P. Agathangelou, I. Katakis, F. Mendez, U. Serdult. D. Gunopulos, 'The lifecycle of internet voters: Data mining for sequences in Swiss referendum data', presented at 24th World Congress of Political Science, July 23-28, 201, Poznań, Poland
- CA22. L. Rori, P. Agathangelou, I. Katakis, D. Gunopulos, B. Richards, "Online Dynamics of Far-Right and Far-Left Communities: The Case of the September 2015 Parliamentary Elections in Greece", presented at the European Consortium for Political Research (ECPR) Joint Sessions, Scuola Normale Superiore, Scuola Superiore Sant' Anna and University of Pisa, Pisa, 24-28 April 2016
- CA21. I. Litou, V. Kalogeraki, I. Katakis, D. Gunopulos, "Real-Time and Cost-Effective Limitation of Misinformation Propagation", IEEE International Conference on Mobile Data Management (MDM 2016), 13-16 June, 2016, Porto, Portugal.

- CA20. I. Katakis, D. Gunopulos, "Integrating Heterogeneous Urban Data for Emergency Response: The INSIGHT project into Dublin's Traffic Control Room", European Data Forum (EDF 2015), Luxembourg, November 16-17, 2015. (poster presentation)
- CA19. N. Zygouras, N. Panagiotou, N. Zacheilas, I. Boutsis, V. Kalogeraki, I. Katakis and D. Gunopulos. "Towards detection of faulty traffic sensors in real-time", 2nd International Workshop on Mining Urban Data (MUD2), International Conference on Machine Learning (ICML 2015), Lille, France.
- CA18. P. Agathangelou, I. Katakis, F. Kokkoras, K. Ntonas, "Mining Domain-Specific Dictionaries of Opinion Words", 15th International Conference on Web Information System Engineering (WISE 2014)
- CA17. D. Kotsakos, P. Sakkos, I. Katakis, D. Gunopulos, "#tag: Meme or Event?", The 2014 IEEE/ACM International Conference on Advances in Social Network Analysis and Mining (ASONAM 2014), Beijing, China, August 17-20, 2014.
- CA16. G. Valkanas, I. Katakis, D. Gunopulos, A. Stefanidis, "Mining Twitter Data with Resource Constraints", The 2014 IEEE/WIC/ACM International Conference on Web Intelligence, 11-14 August 2014, Warsaw, Poland.
- CA15. M. Agathokleous, N. Tsapatsoulis, I. Katakis, "On the quantificiation of missing value impact on Voting Advice Applications", In proceedings of EANN 2013: 14th Engineering Applications of Neural Networks, Halkidiki Greece, Chalkidiki, 2013.
- CA14. I. Katakis, N. Tsapatsoulis, V. Triga, C. Tziouvas and F. Mendez, "Clustering Online Poll Data: Towards a Voting Assistance System",7th International Workshop on Semantic and Social Media Adaptation and Personalization (SMAP 12), Luxembourg-Krichberg, December 3-4, 2012.
- CA13. I. Katakis, G. Pallis, M.D. Dikaiakos, O. Onoufriou, "Automated Tagging for the Retrieval of Software Resources in Grid and Cloud Infrastructures", IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing, Ottawa, Canada, 2012.
- CA12. G. Tsoumakas, E. Loza Mencia, I. Katakis, S. Park, J. Furnkrnaz, "On the combination of two decompositive multi-label classification methods", Workshop on Preference Learning, ECML PKDD 09, Eyke Hullermeir, Johannes Furnkranz (Ed.), pp. 114-133, Bled, Slovenia, 2009
- CA11. I. Katakis, G. Meditskos, G. Tsoumakas, N. Bassiliades, I. Vlahavas, "On the Combination of Textual and Semantic Descriptions for Automated Semantic Web Service Classification", Proceedings of the 5th IFIP Conference on Artificial Intelligence Applications & Innovations (AIAI 2009), pages 95-104, Springer, Thessaloniki, 2009
- CA10. I. Katakis, G. Tsoumakas, I. Vlahavas, "Multilabel Text Classification for Automated Tag Suggestion", Proceedings of the ECML/PKDD 2008 Discovery Challenge, pages 75-83, Antwerp, 2008
  - CA9. G. Tsoumakas, I. Katakis, I. Vlahavas, "Effective and Efficient Multilabel Classification in Domains with Large Number of Labels", Proc. ECML/PKDD 2008 Workshop on Mining Multidimensional Data (MMD'08), pages 30-44, Antwerp, Belgium, 2008
  - CA8. I. Katakis, G. Tsoumakas, I. Vlahavas, "An Ensemble of Classifiers for coping with Recurring Contexts in Data Streams", 18th European Conference on Artificial Intelligence, pages 763-764, IOS Press, Patras, Greece, 2008

- CA7. E. Banos, I. Katakis, N. Bassiliades, G. Tsoumakas, I. Vlahavas, "PersoNews: A Personalized News Reader Enhanced by Machine Learning and Semantic Filtering", 5th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE 2006), pages 975-982, Springer-Verlag, Montpellier, France, 2006
- CA6. G. Tzanis, I. Katakis, I. Partalas, I. Vlahavas, "Modern Applications of Machine Learning", In Proceedings of the 1st Annual SEERC Doctoral Student Conference, Thessaloniki, Greece, July 10, 2006
- CA5. I. Katakis, G. Tsoumakas, I. Vlahavas, "Dynamic Feature Space and Incremental Feature Selection for the Classification of Textual Data Streams", ECML/PKDD-2006 International Workshop on Knowledge Discovery from Data Streams (IWKDDS-2006), pages 107-116, Berlin, Germany
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