



Dr. Pavlos Fafalios

Curriculum Vitae

April 2021

Full name: Pavlos Fafalios
Birth date / place: 14 July 1985 / Chios, Greece
Nationality: Greek
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Military service: Accomplished (Nov. 2008 – Nov. 2009)
Marital status: Married
Languages: Greek (Mother tongue), English (Mastery C2), French (DELF 1)

CURRENT POSITIONS

- **Postdoctoral research fellow** (*Marie Skłodowska-Curie Individual Fellowship*) at the Centre for Cultural Informatics, Institute of Computer Science, Foundation for Research and Technology – Hellas (FORTH), Greece
- **Visiting Lecturer** at the Department of Management Science and Technology, Hellenic Mediterranean University, Greece

SHORT BIO

Dr. Pavlos Fafalios is currently a postdoctoral research fellow at the Centre for Cultural Informatics and the Information Systems Laboratory of FORTH-ICS (Greece), working as principal investigator of the *ReKnow* project (*Marie Skłodowska-Curie Individual Fellowship, Grant agreement ID: 890861*). In parallel, he is a visiting lecturer at the Department of Management Science and Technology of the Hellenic Mediterranean University, teaching *E-commerce, Software Technology, and Algorithms and Data Structures*. He obtained his Engineer's Diploma in 2009 from the Department of Information and Communication Systems Engineering of University of the Aegean (Greece), and his MSc and PhD in 2012 and 2016, respectively, from the Computer Science Department of University of Crete (Greece). After his PhD studies, he worked as a postdoctoral researcher for 3 years at the L3S Research Center of Leibniz University of Hanover (Germany).

His research interests fall in the areas of *Information Retrieval, Semantic Web, Knowledge Representation, and Knowledge Engineering*, with a special interest on *interdisciplinary research* in these areas and the application of the research findings in different disciplines, including *Cultural Heritage and History*. The results of his research have been published in more than 50 refereed research articles. He regularly participates to the programme committee of international conferences (including *CIKM, ISWC and ESWC*) and review papers for international journals (including the *ACM Transactions on the Web* and the *Journal of the Association for Information Science and Technology*).

WORK EXPERIENCE

June 2019 – Today	<i>Postdoctoral researcher</i> Centre for Cultural Informatics (CCI) and Information Systems Laboratory (ISL), Institute of Computer Science (ICS) - Foundation for Research & Technology - Hellas (FORTH) Heraklion, Greece
June 2016 – May 2019	<i>Postdoctoral researcher</i> L3S Research Center, Leibniz University of Hanover Hannover, Germany
Dec. 2010 – May 2016	<i>Research assistant, software engineer, graduate fellow</i> Information Systems Laboratory (ISL), Institute of Computer Science (ICS) - Foundation for Research & Technology - Hellas (FORTH) Heraklion, Greece

TEACHING EXPERIENCE

2020-2021	Visiting Lecturer Hellenic Mediterranean University - Department of Management Science and Technology (Greece) Academic year 2020-2021 Courses: <ul style="list-style-type: none">• <i>Algorithms and Data Structures (MST304)</i>• <i>Software Technology (MST602)</i>• <i>e-Commerce and Internet Applications (MST604)</i>
2019-2020	Visiting Lecturer Hellenic Mediterranean University - Department of Management Science and Technology (Greece) Academic year 2019-2020 Courses: <ul style="list-style-type: none">• <i>Software Technology (MST602)</i>• <i>e-Commerce and Internet Applications (MST604)</i>
2018-2019	Co-organization of Proseminar on <i>Data Mining</i> (more info) Leibniz University of Hanover, Distributed Systems Institute, Department of Knowledge-Based Systems (Germany) Academic year 2018-2019 (Summer semester)
2010 – 2016	Teaching Assistant University of Crete - Computer Science Department (Greece) <u>Duties:</u> lecturing, supervising, student counseling, preparing exercises and projects, marking <u>Courses:</u> <i>CS-150 Programming</i> (Spring semester 2009-2010), <i>CS-252 Object-Oriented Programming</i> (Winter semesters 2013-2014, 2014-2015, 2015-2016), <i>CS-351 Information System Analysis and Design</i> (Winter semesters 2010-2011, 2011-2012, 2012-2013), <i>CS-359 Web Programming</i> (Spring semesters 2010-2011, 2012-2013), <i>CS-463 Information Retrieval Systems</i> (Spring semesters 2014-2015, 2015-2016), <i>CS-561 Web Data Management</i> (Spring semester 2013-2014)

EDUCATION

October 2012 – May 2016 (PhD)	Ph.D., Computer Science Department, University of Crete, Greece <u>Thesis title:</u> <i>“Exploiting Linked Data in Exploratory Search”</i> <u>Thesis hyperlink:</u> http://hdl.handle.net/10442/hedi/38725 <u>Thesis supervisor:</u> Yannis Tzitzikas
February 2010 – July 2012 (MSc)	M.Sc. in Information Systems and E-commerce Technologies, Computer Science Department, University of Crete, Greece <u>Thesis title:</u> <i>“Indexes and Algorithms for Scalable and Flexible Instant Overview Search”</i> <u>Thesis hyperlink:</u> https://elocus.lib.uoc.gr/dlib/b/f/5/metadata-dlib-1348212409-493715-24126.tk <u>Thesis supervisor:</u> Yannis Tzitzikas <u>Average grade of graduate courses (of both MSc and PhD):</u> 8.7/10.0
September 2003 – June 2009 (Dipl. Eng.)	Engineer's degree in Information and Communication Systems Engineering, School of Engineering, University of the Aegean, Greece <u>Thesis title:</u> <i>“Meta-Seeker: A Retroactive Algorithm for Personalized Information from Multiple Web Search Services”</i> <u>Thesis hyperlink:</u> http://hdl.handle.net/11610/8634 <u>Thesis supervisor:</u> Ioannis Anagnostopoulos <u>Degree grade:</u> 7.8/10.0

RESEARCH INTERESTS

- Cultural Informatics / Digital Humanities
- Information Retrieval (Exploratory Search, Semantic Search, Interactive Information Access)
- Conceptual Modeling and Knowledge Representation
- Semantic Web and Linked Data
- Knowledge Engineering
- Data Integration and Data Mining

PUBLICATIONS

Journal publications (peer-reviewed)

1. P. Fafalios, K. Petrakis, G. Samaritakis, K. Doerr, A. Kritsotaki, Y. Tzitzikas, M. Doerr, "FAST CAT: Collaborative Data Entry and Curation for Semantic Interoperability in Digital Humanities", *Journal on Computing and Cultural Heritage* (2021), ACM. **Accepted for publication in April 2021**
2. A. Roy, **P. Fafalios**, A. Ekbal, X. Zhu, S. Dietze, "Exploiting stance hierarchies for cost-sensitive stance detection of Web documents", *Journal of Intelligent Information Systems* (2021), Springer, <https://doi.org/10.1007/s10844-021-00642-z> **Accepted for publication in March 2021**
3. K. Petrakis, G. Samaritakis, T. Kalesios, E. García Domingo, A. Delis, Y. Tzitzikas, M. Doerr, **P. Fafalios**, "Digitizing, Curating and Visualizing Archival Sources of Maritime History: the case of ship logbooks of the nineteenth and twentieth centuries". *Drassana*, No. 28, 60–87 (2021). <https://doi.org/10.51829/Drassana.28.649>
4. C. Nikas, G. Kadilierakis, **P. Fafalios**, Y. Tzitzikas, "Keyword Search over RDF: Is a Single Perspective Enough?", *Big Data and Cognitive Computing*, 4(3):22 (2020), Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/bdcc4030022>
5. E. Ntoutsis, **P. Fafalios**, U. Gadiraju, V. Iosifidis, W. Nejdl, M. Vidal, S. Ruggieri, F. Turini, S. Papadopoulos, E. Krasanakis, I. Kompatsiaris, K. Kinder-Kurlanda, C. Wagner, F. Karimi, M. Fernandez, H. Alani, B. Berendt, T. Kruegel, C. Heinze, K. Broelemann, G. Kasneci, T. Tiropanis, S. Staab, "Bias in data-driven artificial intelligence systems — An introductory survey", *WIREs Data Mining and Knowledge Discovery*, 10:e1356 (2020). <https://doi.org/10.1002/widm.1356>
6. **P. Fafalios** and Y. Tzitzikas, "Answering SPARQL Queries on the Web of Data through Zero-Knowledge Link Traversal", *ACM SIGAPP Applied Computing Review*, 19(3) (2019). <https://doi.org/10.1145/3372001.3372003>
7. **P. Fafalios**, V. Iosifidis, K. Stefanidis, and E. Ntoutsis, "Tracking the History and Evolution of Entities: Entity-centric Temporal Analysis of Large Social Media Archives", *International Journal on Digital Libraries*, 21, 5–17 (2018). Springer Berlin Heidelberg. <https://doi.org/10.1007/s00799-018-0257-7>
8. **P. Fafalios**, H. Holzmann, V. Kasturia, and W. Nejdl, "Building and Querying Semantic Layers for Web Archives (Extended Version)", *International Journal on Digital Libraries*, 21, 149–167 (2018). Springer Berlin Heidelberg. <https://doi.org/10.1007/s00799-018-0251-0>
9. **P. Fafalios** and Y. Tzitzikas, "Stochastic Re-Ranking of Biomedical Search Results based on Extracted Entities", *Journal of the Association for Information Science and Technology (JASIST)*, Vol. 68, No. 11 2017. <https://doi.org/10.1002/asi.23877>
10. M. Mountantonakis, N. Minadakis, Y. Marketakis, **P. Fafalios**, Y. Tzitzikas, "Quantifying the Connectivity of a Semantic Warehouse and Understanding its Evolution over Time", *International Journal on Semantic Web and Information Systems (IJSWIS)*, Vol. 12, Issue 03 (2016), IGI Global (ISSN: 1552-6283). <https://doi.org/10.4018/IJSWIS.2016070102>

11. Y. Tzitzikas, C. Allocca, C. Bekiari, Y. Marketakis, **P. Fafalios**, M. Doerr, N. Minadakis, T. Patkos, L. Candella, "Unifying Heterogeneous and Distributed Information about Marine Species through the Top Level Ontology MarineTLO", Program: Electronic library and Information Systems, Special Issue on Application of Metadata and Semantics in Science, Vol. 50, No. 1 (2016), Emerald (ISSN: 0033-0337). <https://doi.org/10.1108/PROG-10-2014-0072>
12. **P. Fafalios**, M. Baritakis and Y. Tzitzikas, "Exploiting Linked Data for Open and Configurable Named Entity Extraction", International Journal on Artificial Intelligence Tools, Vol. 24, No. 02 (2015), World Scientific (ISSN: 1793-6349). <https://doi.org/10.1142/S0218213015400126>
13. **P. Fafalios** and Y. Tzitzikas, "Type-ahead Exploratory Search through Typo and Word Order Tolerant Autocompletion", Journal of Web Engineering, Vol. 14, No. 1 & 2 (2015), Rinton Press (ISSN: 1540-9589). <https://dl.acm.org/doi/abs/10.5555/2871254.2871260>
14. **P. Fafalios**, P. Papadakos and Y. Tzitzikas, "Enriching Textual Search Results at Query Time using Entity Mining, Linked Data and Link Analysis", International Journal of Semantic Computing, Vol. 08, No. 04 (2014), World Scientific (ISSN: 1793-7108). <https://doi.org/10.1142/S1793351X14400170>
15. **P. Fafalios** and P. Papadakos, "Theophrastus: On Demand and Real-Time Automatic Annotation and Exploration of (Web) Documents using Open Linked Data", Web Semantics: Science, Services and Agents on the World Wide Web, Vol. 29 (2014), Elsevier (ISSN: 1570-8268). <https://doi.org/10.1016/j.websem.2014.07.009>

Conference publications (peer-reviewed)

1. E. Maliaroudakis, K. Boland, S. Dietze, K. Todorov, Y. Tzitzikas, and **P. Fafalios**. "ClaimLinker: Linking Text to a Knowledge Graph of Fact-checked Claims", Demo Paper, In Companion Proceedings of the Web Conference 2021 (ACM), Ljubljana, Slovenia, April 19–23, 2021. <https://doi.org/10.1145/3442442.3458601>
2. D. Dimitrov, E. Baran, **P. Fafalios**, R. Yu, X. Zhu, M. Zloch, and S. Dietze, "TweetsCOVID19 - A Knowledge Base of Semantically Annotated Tweets about the COVID-19 Pandemic", 29th ACM International Conference on Information and Knowledge Management, 19-23 October, 2020. <https://doi.org/10.1145/3340531.3412765>
3. G. Kadilierakis, **P. Fafalios**, P. Papadakos, and Y. Tzitzikas, "Keyword Search over RDF using Document-centric Information Retrieval Systems", 17th Extended Semantic Web Conference, Heraklion, Greece, June 2-4, 2020. https://doi.org/10.1007/978-3-030-49461-2_8
4. G. Kadilierakis, C. Nikas, **P. Fafalios**, P. Papadakos, and Y. Tzitzikas, "Elas4RDF: Multi-perspective Triple-centered Keyword Search over RDF using Elasticsearch", Demo Paper, 17th Extended Semantic Web Conference, Heraklion, Greece, June 2-4, 2020. https://doi.org/10.1007/978-3-030-62327-2_21
5. R. S. João, **P. Fafalios** and S. Dietze, "Better Together - An Ensemble Learner for Combining the Results of Ready-made Entity Linking Systems", 35th ACM/SIGAPP Symposium On Applied Computing, Brno, Czech Republic, March 30-April 3, 2020. <https://doi.org/10.1145/3341105.3373883>
6. A. Tchechmedjiev, **P. Fafalios**, K. Boland, M. Gasquet, M. Zloch, B. Zapilko, S. Dietze, K. Todorov, "ClaimsKG: A Knowledge Graph of Fact-Checked Claims", 18th International Semantic Web Conference, Auckland, New Zealand, October 26–30, 2019. https://doi.org/10.1007/978-3-030-30796-7_20
7. M. Gasquet, D. Brechtel, M. Zloch, A. Tchechmedjiev, K. Boland, **P. Fafalios**, S. Dietze, K. Todorov, "Exploring Fact-checked Claims and their Descriptive Statistics", Demo Paper, 18th International Semantic Web Conference, Auckland, New Zealand, October 26–30, 2019. <http://ceur-ws.org/Vol-2456/paper75.pdf>
8. R. S. João, **P. Fafalios**, and S. Dietze, "Same but Different: Distant Supervision for Predicting and Understanding Entity Linking Difficulty", 34th ACM/SIGAPP Symposium On Applied Computing. Limassol, Cyprus, April 8-12, 2019. <https://doi.org/10.1145/3297280.3297381>
9. **P. Fafalios** and Y. Tzitzikas, "How Many and What Types of SPARQL Queries can be Answered through Zero-Knowledge Link Traversal?", 34th ACM/SIGAPP Symposium On Applied Computing. Limassol, Cyprus, April 8-12, 2019. <https://doi.org/10.1145/3297280.3297505>

10. M. Quraishi, **P. Fafalios**, and E. Herder, "Viewpoint Discovery and Understanding in Social Networks", 10th International ACM Web Science Conference (WebSci'18), Amsterdam, the Netherlands, May 27-30, 2018. <https://doi.org/10.1145/3201064.3201076>
11. **P. Fafalios**, V. Kasturia, and W. Nejdl, "Ranking Archived Documents for Structured Queries on Semantic Layers", 2018 ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL'18), Fort Worth (Texas, USA), June 3-6, 2018. <https://doi.org/10.1145/3197026.3197049>
12. **P. Fafalios**, V. Iosifidis, E. Ntoutsis, and S. Dietze, "TweetsKB: A Public and Large-Scale RDF Corpus of Annotated Tweets", 15th Extended Semantic Web Conference (ESWC'18), Heraklion, Crete, Greece, June 3-7, 2018. https://doi.org/10.1007/978-3-319-93417-4_12 - **Nominated for the "Best Resource Paper" award!**
13. **P. Fafalios**, V. Iosifidis, K. Stefanidis, and E. Ntoutsis, "Multi-aspect Entity-centric Analysis of Big Social Media Archives", 21st International Conference on Theory and Practice of Digital Libraries (TPDL'17), Thessaloniki, Greece, September 18-21, 2017. https://doi.org/10.1007/978-3-319-67008-9_21
14. **P. Fafalios**, H. Holzmann, V. Kasturia, and W. Nejdl, "Building and Querying Semantic Layers for Web Archives", 2017 ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL'17), Toronto (Ontario, Canada), June 19-23, 2017. <https://doi.org/10.1109/JCDL.2017.7991555> - **Nominated for the "Best Paper" award!**
15. **P. Fafalios**, V. Kasturia, and W. Nejdl, "Towards a Ranking Model for Semantic Layers over Digital Archives", Poster paper, ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL'17), Toronto (Ontario, Canada), June 19-23, 2017. <https://dl.acm.org/doi/10.5555/3200334.3200400>
16. **P. Fafalios**, T. Yannakis and Y. Tzitzikas, "Querying the Web of Data with SPARQL-LD", 20th International Conference on Theory and Practice of Digital Libraries (TPDL'16), Hannover, Germany, September 5-9, 2016. https://doi.org/10.1007/978-3-319-43997-6_14
17. **P. Fafalios** and Y. Tzitzikas, "SPARQL-LD: A SPARQL Extension for Fetching and Querying Linked Data", Demo paper, 14th International Semantic Web Conference (ISWC'15), Bethlehem, Pennsylvania, USA, October 2015. http://ceur-ws.org/Vol-1486/paper_71.pdf
18. **P. Fafalios** and Y. Tzitzikas, "Entity-based Stochastic Analysis of Search Results for Query Expansion and Results Re-Ranking", Proceedings of The Twenty-Fourth Text REtrieval Conference (TREC 2015), Gaithersburg, Maryland, USA, November 17-20, 2015. <http://doi.org/10.5281/zenodo.804260>
19. **P. Fafalios** and Y. Tzitzikas, "Post-Analysis of Keyword-based Search Results using Entity Mining, Linked Data and Link Analysis at Query Time", 8th IEEE International Conference on Semantic Computing (ICSC'14), Newport Beach, California, USA, June 2014. <https://doi.org/10.1109/ICSC.2014.11>
20. **P. Fafalios** and Y. Tzitzikas, "Configuring Named Entity Extraction through Real-Time Exploitation of Linked Data", 4th International Conference on Web Intelligence, Mining and Semantic (WIMS'14), Thessaloniki, Greece, June 2014. <https://doi.org/10.1145/2611040.2611085>
21. Y. Tzitzikas, N. Minadakis, Y. Marketakis, **P. Fafalios**, C. Allocca, N. Mountantonakis and I. Zidianaki, "MatWare: Constructing and Exploiting Domain Specific Warehouses by Aggregating Semantic Data", 11th Extended Semantic Web Conference (ESWC'14), Anissaras, Heraklion, Greece, May 2014. https://doi.org/10.1007/978-3-319-07443-6_48
22. Y. Tzitzikas, C. Allocca, C. Bekiari, Y. Marketakis, **P. Fafalios**, M. Doerr, N. Minadakis, T. Patkos and L. Candela, "Integrating Heterogeneous and Distributed Information about Marine Species through a Top Level Ontology", 7th Metadata and Semantic Research Conference (MTSR'13), Thessaloniki, Greece, November 2013. https://doi.org/10.1007/978-3-319-03437-9_29
23. **P. Fafalios** and Y. Tzitzikas, "X-ENS: Semantic Enrichment of Web Search Results at Real-Time", Demo paper, 36th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR'13), Dublin, Ireland, 27 July - 1 August 2013. <https://doi.org/10.1145/2484028.2484200>

24. **P. Fafalios**, I. Kitsos, Y. Marketakis, C. Baldassarre, M. Salampasis and Y. Tzitzikas, “*Web Searching with Entity Mining at Query Time*”, 5th Information Retrieval Facility Conference (IRFC'12), Vienna, Austria, July 2012. https://doi.org/10.1007/978-3-642-31274-8_6
25. **P. Fafalios**, I. Kitsos and Y. Tzitzikas, “*Scalable, Flexible and Generic Instant Overview Search*”, Demo paper, 21st International Conference on World Wide Web (WWW'12), Lyon, France, April 2012. <https://doi.org/10.1145/2187980.2188042>
26. **P. Fafalios** and Y. Tzitzikas, “*Exploiting Available Memory and Disk for Scalable Instant Overview Search*”, 12th International Conference on Web Information System Engineering (WISE'11), Sydney, Australia, October 2011. https://doi.org/10.1007/978-3-642-24434-6_8

Workshop publications (peer-reviewed)

1. C. Nikas, **P. Fafalios**, and Y. Tzitzikas, “*Two-stage Semantic Answer Type Prediction for Question Answering using BERT and Class-Specificity Rewarding*”, Proceedings of the SeMantic Answer Type prediction task (SMART) at ISWC 2020 Semantic Web Challenge, co-located with the 19th International Semantic Web Conference (ISWC 2020), Virtual Conference, November 5th, 2020. <http://ceur-ws.org/Vol-2774/paper-03.pdf>
2. K. Boland, **P. Fafalios**, A. Tchechmedjiev, K. Todorov, and S. Dietze, “*Modeling and Contextualizing Claims*”, 2nd International Workshop on Contextualized Knowledge Graphs (CKG 2019), in conjunction with the 18th International Semantic Web Conference (ISWC 2019), Auckland, New Zealand, 26-30 October, 2019. http://ceur-ws.org/Vol-2599/CKG2019_paper_1.pdf
3. N. Mohapatra, V. Iosifidis, A. Ekbal, S. Dietze, and **P. Fafalios**, “*Time-Aware and Corpus-Specific Entity Relatedness*”, Workshop on Deep Learning for Knowledge Graphs and Semantic Technologies (DL4KGS), in conjunction with the 15th Extended Semantic Web Conference (ESWC'18), Heraklion, Crete, Greece, June 3-7, 2018. <http://ceur-ws.org/Vol-2106/paper4.pdf>
4. T. Yannakis, **P. Fafalios**, and Y. Tzitzikas, “*Heuristics-based Query Reordering for Federated Queries in SPARQL 1.1 and SPARQL-LD*”, 2nd Workshop on Querying the Web of Data (QuWeDa), in conjunction with the 15th Extended Semantic Web Conference (ESWC'18), Heraklion, Crete, Greece, June 3-7, 2018. <http://ceur-ws.org/Vol-2110/paper7.pdf>
5. M. Mountantonakis, C. Allocca, **P. Fafalios**, N. Minadakis, Y. Marketakis, C. Lantzaki and Y. Tzitzikas, “*Extending VoID for Expressing the Connectivity Metrics of a Semantic Warehouse*”, 1st International Workshop on Dataset Profiling & Federated Search for Linked Data (PROFILES'14), in conjunction with the 11th Extended Semantic Web Conference (ESWC'14), Anissaras, Heraklion, Greece, May 2014. <http://ceur-ws.org/Vol-1151/paper10.pdf>
6. Y. Tzitzikas, N. Minadakis, Y. Marketakis, **P. Fafalios**, C. Allocca and N. Mountantonakis, “*Quantifying the Connectivity of a Semantic Warehouse*”, 4th International Workshop on Linked Web Data Management (LWDM'14), in conjunction with the 17th International Conference on Extending Database Technology (EDBT'14), Athens, Greece, March 2014. <http://ceur-ws.org/Vol-1133/paper-40.pdf>
7. **P. Fafalios**, M. Salampasis and Y. Tzitzikas, “*Exploratory Patent Search with Faceted Search and Configurable Entity Mining*”, 1st International Workshop on Integrating IR technologies for Professional Search, in conjunction with the 35th European Conference on Information Retrieval (ECIR'13), Moscow, Russia, March 2013. http://ceur-ws.org/Vol-968/irps_8.pdf

Book chapters (peer-reviewed)

1. M. Mountantonakis, N. Minadakis, Y. Marketakis, **P. Fafalios** and Y. Tzitzikas, “*Connectivity, Value and Evolution of a Semantic Warehouse*”, Book chapter at "Innovations, Developments, and Applications of Semantic Web and Information Systems", pp. 1-31, 2018, IGI Global. <https://doi.org/10.4018/978-1-5225-5042-6.ch001>
2. **P. Fafalios** and Y. Tzitzikas, “*Exploratory Professional Search through Semantic Post-Analysis of Search Results*”, Professional Search in the Modern World, Lecture Notes in Computer Science (LNCS), Vol. 8830, Springer, 2014. https://doi.org/10.1007/978-3-319-12511-4_9

Publications in national conferences (peer-reviewed)

1. **P. Fafalios**, I. Kitsos and Y. Tzitzikas, “Κλιμακώσιμη και Ευέλικτη Υποστήριξη Στιγμαϊάας Επισκοπικής Αναζήτησης” (*Scalable, Flexible and Generic Instant Overview Search*), Demo paper, 11th Hellenic Data Management Symposium (HDMS'12), Chania, Greece, June 2012. <http://hdms2012.softnet.tuc.gr/HDMS2012.pdf>

Publications in magazines

1. M. Doerr, P. Fafalios, A. Delis, “*Digital Seafaring: Digitising, Curating and Exploring Archival Sources of Maritime history*”, ERCIM News, No. 124, Jan’ 2021. <https://ercim-news.ercim.eu/images/stories/EN124/EN124-web.pdf>
2. Y. Tzitzikas, C. Allocca, C. Bekiari, Y. Marketakis, **P. Fafalios** and N. Minadakis, “*Ontology-based Integration of Heterogeneous and Distributed Information of the Marine Domain*”, ERCIM News, No. 96, Jan’ 2014. <https://ercim-news.ercim.eu/images/stories/EN96/EN96-web.pdf>

SERVICE TO THE RESEARCH COMMUNITY

Organizing Committee

- **[Co-organizer]** 1st International Workshop on Knowledge Graphs for Online Discourse Analysis (**KnOD 2021**)
- **[Proceedings Chair]** 15th International Conference on Web-based Learning (**ICWL 2016**)

Program Committee

- 32nd ACM Conference on Hypertext and Social Media (**HT 2021**)
- 18th Extended Semantic Web Conference (**ESWC 2021**)
- 23rd Intern. Workshop on Design, Optimization, Languages & Analytical Processing of Big Data (**DOLAP 2021**)
- 29th ACM International Conference on Information and Knowledge Management (**CIKM 2020**)
- 31st ACM Conference on Hypertext and Social Media (**HT 2020**)
- 11th IEEE International Conference on Knowledge Graph (**ICKG 2020**)
- 17th Extended Semantic Web Conference (**ESWC 2020**)
- 19th International Semantic Web Conference (**ISWC 2020** - Posters & Demos Track)
- 16th Extended Semantic Web Conference (**ESWC 2019**)
- 18th International Semantic Web Conference (**ISWC 2019** - Posters & Demos Track)
- 17th International Semantic Web Conference (**ISWC 2018** - Posters & Demos Track)
- 16th International Semantic Web Conference (**ISWC 2017** - Posters & Demos Track)
- 9th International ACM Web Science Conference 2017 (**WebSci 2017** - Posters Track)
- Workshop on Benchmarking Linked Data (**BLINK 2017**), co-located with ISWC 2017
- 15th International Conference on Web-based Learning (**ICWL 2016**)
- 18th International Conference on Asia-Pacific Digital Libraries (**ICADL 2016**)

Referee

- ACM Journal on Computing and Cultural Heritage (2021)
- Journal of Web Semantics (Elsevier) (2021)
- ACM Transactions on the Web (TWEB) (2019,2021)
- Semantic Web Journal (IOS press) (2020)
- Information Systems (Elsevier) (2020)
- IEEE Access (2020)
- The VLDB Journal (2019)
- Journal of the Association for Information Science and Technology (2016-2018)
- Knowledge-Based Systems – Elsevier (2017)
- Knowledge and Information Systems - Springer (2016)
- IEEE Transactions on Knowledge and Data Engineering (2016, 2017)
- Information Processing & Management - Elsevier (2016)
- Multimedia Tools and Applications - Springer (2015)

PARTICIPATION IN RESEARCH PROJECTS AND ACTIONS

ReKnow (2020-now)	Project “ReKnow – Research Knowledge Documentation, Analysis and Exploration in Empirical and Descriptive Sciences”, Marie Skłodowska-Curie Individual Fellowship (Grant agreement ID: 890861). https://reknow.ics.forth.gr/ <u>Role</u> : Principal researcher, fellowship holder
RICONTRANS (2019-now)	Project “RICONTRANS – Visual Culture, Piety and Propaganda: Transfer and Reception of Russian Religious Art in the Balkans and the Eastern Mediterranean (16th to early 20th Century)”, ERC Consolidator Grant (No. 818791). https://ricontrans-project.eu/ <u>Role</u> : Supervision and implementation of activities related to data management.
SeaLiT (2019-now)	Project “SeaLiT – Seafaring Lives in Transition. Mediterranean Maritime Labour and Shipping during Globalization, 1850s-1920s”, ERC Starting Grant (No. 714437). http://www.sealitproject.eu/ <u>Role</u> : Supervision and implementation of activities related to data management.
CMBR (2019-2020)	Project “CMBR – Centre for the study and sustainable exploitation of Marine Biological Resources”, Greek National Roadmap for Research Infrastructures (MIS: 5002670). http://cmbr.hcmr.gr/ <u>Role</u> : Research and implementation of methods and tools for data integration and exploration.
ALEXANDRIA (2016 – 2019)	Project “ALEXANDRIA – Foundations for Temporal Retrieval, Exploration and Analytics in Web Archives”, ERC Advanced Grant (No. 339233). https://cordis.europa.eu/project/id/339233 <u>Role</u> : Research in methods for the semantic and entity-based exploration of Web and Social Media archives.
BlueBRIDGE (2015 – 2016)	Project “BlueBRIDGE - Building Research environments for fostering Innovation, Decision making, Governance and Education to support Blue growth”, H2020-EINFRA-2015-1 (No. 675680). https://cordis.europa.eu/project/id/675680 <u>Role</u> : Extension of the X-Search system for enabling the stochastic re-ranking of search results based on extracted entities.
iMarine (2012 – 2014)	Project “iMarine – Data e-Infrastructure Initiative for Fisheries Management and Conservation of Marine Living Resources”, FP7-INFRASTRUCTURES (No. 283644). https://cordis.europa.eu/project/id/283644 <u>Role</u> : Design and development of the system “X-Search” for the semantic exploration of search results, as well as the system “X-Link” for the extraction of entities and their further enrichment by exploiting Linked Data.
MUMIA (2012 - 2014)	Action “MUMIA – Multilingual and Multifaceted Interactive Information Access”, COST Action IC1002. https://www.cost.eu/actions/IC1002/ <u>Role</u> : Member of the action, involved in Working Group 4 – Semantic Search, Faceted Search and Visualization.

SOFTWARE / PROTOTYPES

ClaimLinker	Web application and API that links arbitrary text to a knowledge graph of fact-checked claims, offering a novel kind of semantic annotation of unstructured content. Developed under my supervision. Source code and more info: https://github.com/malvag/ClaimLinker
SPARQL-LD	Extension of SPARQL 1.1 that enables to directly fetch and query RDF data from heterogeneous web sources via SERVICE calls. Source code and more info: https://github.com/fafalios/sparql-ld
X-Search	Web search service for semantic and entity-based exploration of search results. Demo and more info: http://www.ics.forth.gr/isl/X-Search

X-Link	Configurable and Linked Data-based named-entity extraction framework. Demo and more info: http://www.ics.forth.gr/isl/X-Link
Theophrastus	System for the semantic annotation and exploration of web documents. Theophrastus was awarded the 1st prize in Blue Hackathon 2013. Demo and more info: http://www.ics.forth.gr/isl/Theophrastus
IOS	System / functionality for instant overview search (search-as-you-type). Demo and more info: http://www.ics.forth.gr/isl/ios
Ithaca	Tool for converting and integrating open datasets to Linked Open Data. Ithaca was awarded the 1 st prize in Hack4Med 2014 (the HOMER project Hackathon). Source code and more info: https://github.com/mountanton/Ithaca

DISTINCTIONS / AWARDS / GRANTS

Distinctions

- **Individual postdoctoral research fellowship “Marie Skłodowska-Curie”** (H2020-MSCA-IF-2019) for the implementation of the project «*ReKnow – Research Knowledge Documentation, Analysis and Exploration in Empirical and Descriptive Sciences*» (Grant Agreement ID: 890861), June 2020 – May 2022.
- **Finalist for the “2019 ERCIM Cor Baayen Young Researcher Award”**, awarded each year to a promising young researcher in computer science or applied mathematics ([more info](#) / [archived page](#)).
- **Fellowship from legacy “Maria Michael Manasaki”** for the academic year 2014-2015. This fellowship is awarded once a year to the best graduate student of Computer Science department of University of Crete.

Awards

- **1st prize** for the “*Best Homer Federation Open Data reuse app*”, **2nd prize** for the “*Most useful application for a public sector administration*”, and **1st prize** for the “*Best Solution for Crete*”, in **Hack4Med, the HOMER project Hackathon**, held in the University of Crete, Department of Computer Science, May 16-17, 2014, Voutes Campus, Heraklion, Greece. Michalis Mountantonakis and I developed and presented the system “*Ithaca: From Open Data to Linked Open Data*”.
- **1st prize in Blue Hackathon 2013**, held in the Hellenic Centre for Marine Research (HCMR), July 1-2, 2013, Gournes, Heraklion, Greece. Panagiotis Papadakos and I developed and presented the system “*Theophrastus: A Semantic Exploration Tool for Marine Taxonomists*”.

Grants

- **Travel grant award from the Association for Computing Machinery (ACM)** for attending the SIGIR’13 conference in Dublin, Ireland (July 28 – August 1, 2013).
- **Travel grant award from the Semantic Web Science Association (SWSA) and the National Science Foundation (NSF)** for attending the ISWC’15 conference in Bethlehem, Pennsylvania, USA (Oct 11-15, 2015).

TECHNICAL SKILLS

Proficient in:

- Java, J2EE (Servlets, JSP)
- PHP, HTML, CSS, JavaScript, AJAX, SQL
- XML, XPath, XQuery, JSON
- RDF, RDF/S, OWL, SPARQL/SPARQL 1.1, Linked Data
- Ontology Engineering, Knowledge Representation
- UML