

PERSONAL INFORMATION

Family name, First name: **Zissis, Dimitrios**

Researcher Profile: <https://scholar.google.com/citations?hl=en&user=NgttyZgAAAAJ> ||

ORCHID ID: 0000-0003-2870-2656

• CURRENT POSITION(S)

2016 –present Associate Professor, Department of Product and Systems Design Engineering, University of the Aegean, Syros, Greece

• EDUCATION

2011 PhD Information and Communication Systems, Department of Product and Systems Design Engineering, University of the Aegean, Syros, Greece.

2005 Master of Science (MSc), Computing and Information Systems, John Moore's University of Liverpool, UK

2004 Bachelor of Science (BSc) in Computer Science (Hons), The University of Liverpool, UK

• ORGANISATION OF SCIENTIFIC MEETINGS AND SPECIAL ISSUE PUBLICATIONS(since 2015)

2018 Guest Editor, Special Issue on High Performance Services Computing and Internet Technologies, Future Generation Computer Systems, Elsevier

2017 Invited Session Chair, The 23rd ICE/IEEE International Technology Management Conference, Madeira, Portugal

2017 Guest Editor, Special Issue on Spatiotemporal Big Data Challenges, Approaches, and Solutions, Future Generation Computer Systems, Elsevier

2016 Guest Editor, Special Issue on Software Architectures and Systems for Real Time Data Stream Analytics, Journal of Systems and Software, Elsevier

2015 Organiser/Chair, IEEE International Workshop on Real Time Data Stream Analytics (RTStreams 2015), held in conjunction with IEEE BigDataSE-15, Helsinki, Finland

• COMMISSIONS OF TRUST (since 2015)

2018 – Program Chair, International Workshop on Big Mobility Data Analytics (**BMDA**), co-located with EDBT/ICDT Conference, March 26, 2018, Vienna, Austria

2018 Program Chair, International Workshop on Semantic Big Data, **ACM SIGMOD 2018**

2017 Program Chair, International Workshop on Cloud Computing Security: Threats, Intelligence, and Mitigation (**CCSTIM**), In conjunction with the 10th IEEE/ACM International Conference on Utility and Cloud Computing (UCC)

2017 Program Chair, International Workshop on Semantic Big Data, **ACM SIGMOD 2017**

2017 Program Chair, Special Session on High Performance Services Computing and Internet Technologies (**SerCo 2017**), The International Conference on High Performance Computing & Simulation (HPCS 2017)

2017 Editor, International Journal of Internet of Things and Cyber-Assurance, Inderscience

2017 Program Chair, 22nd IEEE Symposium on Computers and Communications (**ISCC 2017**)

2017 Program Chair, Conference on the Economics of Grids, Clouds, Systems, and Services, **GECON 2017**

2016 Program Chair, Conference on the Economics of Grids, Clouds, Systems, and Services, **GECON 2016**

2016 Program Chair, IEEE International Workshop on Maritime Domain Data Mining (**MDDM 2016**) held in conjunction with The IEEE International Conference on Data Mining series

2016 Program Chair, International Workshop on Semantic Big Data, **ACM SIGMOD 2016**

2016 Program Chair, International Joint Conference on Electronic Voting, **E-VOTE-ID 2016**

2015 Program Chair, IEEE Wireless Communications and Networking Conference

2015 Program Chair, 7th International Conference on Cloud Computing Technology and Science, **CLOUDCOM'15**

2015 present Editor, Future Generation Computer Systems (**FGCS**), Elsevier

2010–2017: **Reviewer** for (*only journals listed*) ACM Computing Reviews; ACM Transactions on Multimedia Computing Communications and Applications; Computers & Security, Elsevier; Concurrency and Computation: Practice and Experience, Wiley; Electronic Journal of e-Government, Academic Publishing; Evolving Systems, Springer; Frontiers of Information Technology & Electronic Engineering, Springer; Future Generation Computer Systems, Elsevier; Government Information Quarterly, Elsevier; IEEE Cloud Computing; IEEE Design & Test; IEEE Transactions on Cloud Computing; IEEE Transactions on Computers;

IEEE Transactions on Information Forensics & Security; IEEE Transactions on Services Computing; IET Software; Information and Software Technology, Elsevier; Information Fusion, Elsevier; Information Security Journal: A Global Perspective. Taylor & Francis; International Journal of Artificial Intelligence and Soft Computing, Inderscience Publishers; International Journal of Cloud Computing, Inderscience Publishers; International Journal of Communication Networks and Distributed Systems (IJCNDS); Inderscience Publishers; International Journal Of Computer Applications In Technology, Inderscience Publishers ; International Journal of Information and Communication Technology, Inderscience; Journal of Ambient Intelligence and Humanized Computing, Springer; Journal of Grid Computing, Springer; Journal of Internet Services and Applications, Springer; Journal of Systems and Software, Elsevier; Open Journal of Cloud Computing; Scientific Research and Essays, Academic Journals; Security and Communication Networks, Wiley & Son

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

I am a member of the IEEE Computer Society, the IEEE Internet of Things Technical Community, the IEEE Big Data Technical Community, the IEEE Cloud Computing Technical Community, the IEEE Intelligent Transportation Systems Society and the Young Researchers Committee of the World Federation on Soft Computing and the Big Data Value Association-BDVA (the private counterpart to the EU Commission to implement the BDV PPP programme).

HIGHLIGHTED PUBLICATIONS (top 5)

- 2017 G Spiliopoulos, **D Zissis**, K Chatzikokolakis, A Big Data Driven Approach to Extracting Global Trade Patterns, Mobility Analytics for Spatio-temporal and Social Data with VLDB 2017
- i. In this work our aim was to transform billions of records of maritime spatiotemporal data into information for understanding the patterns of global trade by adopting distributed processing approaches (based on the MapReduce paradigm).
 - ii. This is the leading conference on Very Large Databases with an acceptance rate of approximately 10-20%
- 2017 A Valsamis, K Tserpes, **D Zissis**, D Anagnostopoulos, T Varvarigou, Employing traditional machine learning algorithms for big data streams analysis: The case of object trajectory prediction, Journal of Systems and Software 127, 249-257, 2017
- i. In this paper, we model the trajectory of sea vessels and provide a service that predicts in near-real time the position of any given vessel. We benchmark a number of prediction models and explore the necessary trade-offs between accuracy, performance and resource utilization given the large volume and update rates of input data.
 - ii. **Impact Factor: 2.444**
- 2016 L. M. Millefiori, **D. Zissis**, L. Cazzanti and G. Arcieri, "A distributed approach to estimating sea port operational regions from lots of AIS data" 2016 IEEE International Conference on Big Data (**IEEE Big Data**), Washington, DC, 2016, pp. 1627-1632
- i. In this work, we leverage huge amounts of vessel data and distributed machine learning to define a seaport's extended area of operation. Specifically, we present our adaptation of the well-known KDE algorithm to the map-reduce paradigm, and report results on the port of Shanghai.
 - ii. This is **the leading conference on Big Data** with an acceptance rate of approximately 10%
- 2015 **Dimitrios Zissis**, Elias K. Xidias, Dimitrios Lekkas, A cloud based architecture capable of perceiving and predicting multiple vessel behaviour, In **Applied Soft Computing**, Volume 35, 2015, Pages 652-661, ISSN 1568-4946
- i. In this paper, we develop an Artificial Neural Network (ANN) capable of predicting a vessels future behaviour, based on events that occur in a predictable pattern, across large map areas.
 - ii. This is amongst the leading journals in artificial intelligence (11 in google scholar) with an Impact Factor: **3.541**
- 2012 **Dimitrios Zissis**, Dimitrios Lekkas, Addressing cloud computing security issues, In Future Generation Computer Systems, Volume 28, Issue 3, 2012, Pages 583-592, ISSN 0167-739X, <https://doi.org/10.1016/j.future.2010.12.006>.

- i. The aim of this paper was twofold; firstly, to evaluate cloud computing and security by identifying unique security requirements and secondly to attempt to present a viable solution that eliminated potential threats. It was an attempt to evaluate the potential applications of early efforts towards cloud computing in the context of e-government and review methods of proving computing as a service platforms.
- ii. Journal Impact Factor: **3.997**
- iii. This paper has been listed by **Thomson Reuters in the top 0,1% of papers** published globally in Computer Science from 2010-2014
- iv. Since its publication, it has been constantly featured in the most downloaded papers across all journal publications in Computer Science by Elsevier.

• **OVERALL IMPACT**

Publications	41 (14 Journals, 20 Conferences, 4 Book chapters, 2 Books)
Citations	1618
First author	18
Without PhD Advisor	15
Years since first publication	10
Cites/Year	161.80
Papers/Author	15.65
Authors/Paper	3.33
h-index	6
g-index	40

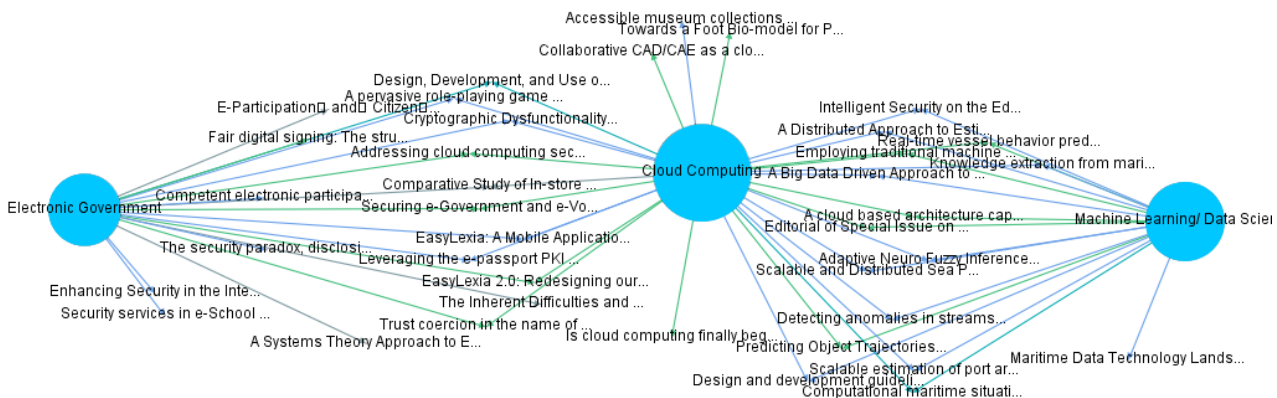
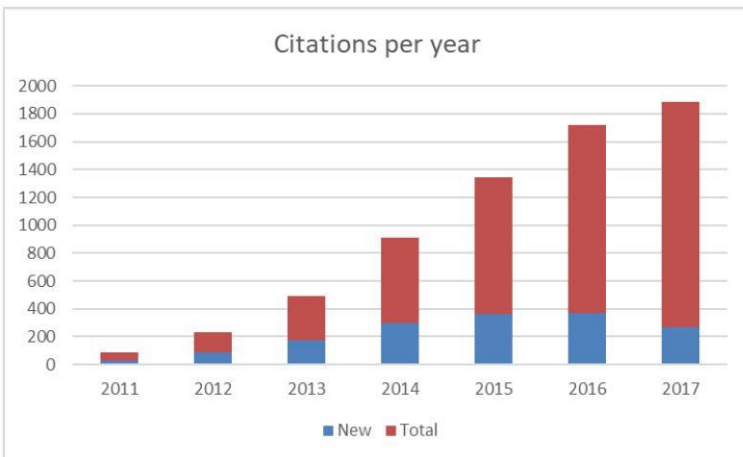


Figure 1. A graph diagram revealing the pillars of my previous research publications based on keyword clustering. Each edge is a scientific publication (green for journals and blue for conferences)

• **PATENTS BASED ON MY WORK.**

LonoCloud, Inc., US8782788 B2, Systems, methods, and apparatus for improved application security, is based upon my paper “Addressing cloud computing security issues”, In FGCS, Volume 28, Issue 3, 2012.

• **INVITED PRESENTATIONS**

- 2017 Invited Presentation, Challenges to exploit Big Maritime Data Workshop, 5th Hellenic Forum For Science Technology and Innovation, Demokritos National Centre for Scientific Research, Athens Greece
- 2017 Invited Presentation, Big Data Value Association, Activity Group, Brussels
- 2016 Invited Presentation, Maritime knowledge discovery and Anomaly Detection Workshop, European Commission – Joint Research Centre, Ispra (Italy)