

PETER (PANAGIOTIS) TRIANTAFILLOU
Department of Computer Science, University of Warwick, CV4 7AL, U.K.
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EDUCATION

- Ph.D. in Computer Science**, University of Waterloo, Waterloo, Canada. September 1988 - October 1991.
Thesis: Employing Replication to Achieve High Availability and Efficiency in Distributed Systems.
Best PhD Thesis: Department of Computer Science and Faculty of Mathematics.
- M.Sc. in Computer Science**, University of Western Ontario, London, Canada. September 1986 - October 1987.
Thesis: Issues of Name Management in Internet Systems.
Fastest MSc Completion Time.
- B.A. Honours in Computer Science**, York University, Toronto, Canada. September 1982 - June 1986.
Dean's Honor Roll.

POSITIONS HELD

01/09/2017 – Present:

University of Warwick

Professor and Head of Data Sciences Theme, Department of Computer Science

Alan Turing Institute

Turing Faculty Fellow

University of Glasgow

Honorary Senior Research Fellow, School of Computing Science

Urban Big Data Centre

Member of Advisory Board

01/01/2013 – 31/08/2017:

University of Glasgow

Professor, School of Computing Science, Chair of Data Systems

01/08/2014 – 01/11/2017:

Urban Big Data Centre, Associate Director.

26/6/2002 – 31/12/2012:

University of Patras, Patras, Greece

Professor, Dept. of Computer Engineering and Informatics (CEID).

Director, NetCINS: Network-Centric Information Systems Laboratory,

Director, Software Division of CEID (Sept. 2007 – Sept. 2010).

Senior Researcher, Research/Academic Computer Technology Institute.

1/2/2012 – 31/12/2012:

Max-Planck Institute for Informatics, Databases & Information Systems Group,

Visiting Professor: Research on big data analytics.

15/9/2004 – 15/7/2005:

Max-Planck Institute for Informatics, Databases & Information Systems Group,

Visiting Professor: Research on big data analytics.

2/11/2000 – 26/6/2002:

Technical University of Crete, Chania, Greece

Professor, Dept. of Computer and Electronics Engineering.

Director, SOFTNET: Software Systems for Network Applications Laboratory.

1/1996 – 1/11/2000:

Technical University of Crete, Chania, Greece

Assistant Professor, Dept. of Computer and Electronics Engineering.

9/1991 – 8/1996:

Simon Fraser University, Vancouver, B.C. Canada.

Assistant Professor, (tenure-track) School of Computing Science.

RESEARCH AREAS

Machine Learning for Data Systems, Data Science / Analytics, Management of Big Data, Large-scale Distributed Data Infrastructures, Information Retrieval, Data Mining and Knowledge Discovery. Specifically:

- Machine Unlearning
 - For Computer Vision / classification tasks
 - For Data Systems and downstream DB tasks (e.g., AQP, Selectivity/Cardinality Estimations, ...)
 - For Large Language Models
- Statistical and Machine Learning Techniques for Data Intensive Analytics and vice versa.
 - Adaptive-Learning Models for Monitoring and Adapting to Dynamic Workloads and Data Spaces.
 - Distributed and Federated Learning.
- Complex Analytics Processing and Optimization.
 - Scalability, efficiency, inferential-accuracy, and money-costs.
 - Exploratory Analytics, in-DBMS Analytics, Approximate Query Processing, Sampling.

RESEARCH HONOURS AND AWARDS

- Winner of the (test-of-time) **most influential paper award**, ACM International Conference on Distributed Event Based Systems, June 2019, for our DEBS 2004 paper.
- With my PhD student, Atoshum Cahsai, winner of the 5th IEEE International Conference on Big Data, Big Data 2018, **best student paper award** (among 500+ submissions), November 2018.
- Winner of 39th ACM Special Interest Group on Information Retrieval, SIGIR 2016, Conference, **best paper award**, (among 340+ submissions), July 2016.
- Winner of 15th ACM International Conference on Information and Knowledge Management, CIKM 2006, **best paper award**, (among 500+ submissions), November 2006.
- I won the best PhD Thesis and the nomination of the Department of Computer Science and the Faculty of Mathematics at the University of Waterloo for the **1991 UW Gold Metal for outstanding achievements at the doctoral level**. (Each department and then each of six Faculties nominates one graduating Ph.D. student for this prize). The Math Faculty at UW is one of the largest and most prestigious in the world with 5 departments and with 200+ faculty members.
- PhD student Fotis Savva won 2nd place award at the graduate student research competition at SIGMOD19 Conference.

Papers Selected/Invited for Journal Publication as Best-Of Conference:

- The paper "*Understanding Information Need: An fMRI Study*", ACM-SIGIR16, was invited for publication to the prestigious ACM Transactions on Information Systems (ACM TOIS).
- The paper "*Scaling Out Big Data Missing Value Imputations: Pythia vs Godzilla*", ACM-SIGKDD14, was selected and was invited for publication to the prestigious, interdisciplinary journal *Big Data*.
- The paper "*Optimal Memory Exploitation for Continuous Media: to cache or to prefetch*", 7th International Workshop on Multimedia Information Systems, (MIS) Nov. 2001, was selected as one of the best papers in the conference and was invited for a special issue of the Journal *Multimedia Tools and Applications*, published by Kluwer Academic.
- The paper "*Scheduling Strategies for Mixed Workloads in Multimedia Information Systems*", IEEE Workshop on Research Issues in Data Engineering, (RIDE), on Continuous Media Databases, Feb. 1998, was selected as one of the best papers in the conference and was invited for a special issue of the Journal *Multimedia Tools and Applications*, published by Kluwer Academic.

Scholarships and Fellowships

- Natural Sciences and Engineering Research Council (NSERC), Canada, Post-Graduate Scholarship (1989, 1990).
- Information Technology Research Centre (ITRC) Fellowship (1988, 1989, 1990), Canada.
- University of Waterloo, Institute for Computer Research Graduate Scholarship (1988, 1989, 1990).
- Ontario Graduate Scholarship (1988).
- University of Western Ontario Special University Scholarship (1986, 1987).
- Dean's Honour Roll, York University Graduating Class of 1986.

PUBLICATIONS HIGHLIGHTS

Publications include 150+ journal and conference papers and specialized workshops, spanning the best publication venues in the following areas, and including 4 best paper awards in major conferences, 40+ papers in conferences with acceptance rates <20% and 4 vision papers in top venues. Research Areas:

- Data Management and Analytics: VLDB Journal, IEEE TKDE, PVLDB, SIGMOD, ICDE, BigData, EDBT, CIDR.
- Distributed Data Systems: ACM TOCS, ACM TOIS, IEEE TSE, IEEE ICDCS, ACM/Usenix Middleware, ACM DEBS.
- Machine Learning, Data Mining and Knowledge Discovery: NeurIPS, ICML, ACM TKDD, ACM KDD, IEEE ICDM, IEEE BigData.
- Information Retrieval: WWW, ACM SIGIR, ACM CIKM, ECIR.

FUNDING and PROJECT INVOLVEMENT

Overall Funding:

- UK:
 - Engineering and Physical Sciences Research Council (latest project total funding £3M, co-PI with equal PI ownership with PI),
 - Economics and Social Sciences Research Council (UBDC total funding >£10M, Associate Director),
 - UKRI (£90k)
 - Alan Turing Institute (4 projects for ~£300k).
- European Union (Personal funding ~1.5M Euro).
- Greece: General Secretariat of Research, Ministry of Education (Personal funding >750k Euro).
- Canada: Natural Sciences and Engineering Research Council (>\$100k).
- Industry: Huawei Technologies Co Ltd (Ireland Research Centre): (~750k Euro).

Selected Projects:

- Exact Query Processing and Analytics, Huawei, January 2022 – December 2022. Budget: £216k. Principal Investigator.
- Approximate Analytical-Query Processing, Huawei, November 2019 – May 2022. Budget: £457k. Principal Investigator.
- Enabling massive-data analytics over linked data resources, Alan Turing Institute / UKRI, November 2019 – Oct 2020. Budget: ~£56k. Principal Investigator.
- Scalable Regression: Tools and Techniques, Alan Turing Institute / UKRI, November 2018 – April 2019. Budget: ~£110k. Principal Investigator.
- Turing Fellow, Alan Turing Institute, March 2018 – October 2020. Budget: ~£137k.
- Closed-Loop Data Science for Computationally- and Data-Intensive Analytics. EPSRC, UK. January 2018 – December 2021. Budget: ~£3M. Co-Investigator.
- Urban Big Data Research Centre. ESRC, UK. February 2014 – January 2019. Associate Director and Co-PI. Budget: >£10M, (ESRC ~£7.3M). PI Ownership: ~£813k.
- Cloud9: Information Storage, Retrieval, and Analysis over Internet-Scale Cloud Stores. Funded by the Greek Office for Research and Technology. September 2011 – Aug 2014. Principal Investigator. Budget: ~600,000 Euro.
- LAWA: Longitudinal Analytics over Web Archives, STREP Project funded by the European Commission, IST Future and Emerging Technologies Program. September 2010 – August 2013. Principal Investigator (University of Patras). Budget: 466,000 Euro.
- EICOS: Decentralized Information Access. Greek Office for Research and Technology. September 2011 – August 2014. Site Leader / Co-Investigator. Budget: ~45,000 Euro.
- AEOLUS Project: Integrated Project. Funded by the European Commission, IST Future and Emerging Technologies Program. January 2005 – December 2008. Overlay Computer. Budget: ~100,000 Euro.
- PENED03 Project: funded by the Greek Ministry of Education. September 2006 – September 2008. Monitoring and statistics in P2P systems. Project Coordinator. Budget: 60,000 Euro.
- DAEMON Project: funded by the Greek Research and Technology Secretariat. September 2004 – September 2007. P2P and sensor networks. Project Coordinator. Budget: 66,000 Euro.
- DELIS Project: Integrated Project, funded by the European Commission, IST Future and Emerging Technologies Program. January 2004 – December 2007. Large-scale Complex Systems. CTI/University of Patras PI for Subproject on Peer-to-Peer Computing. Budget: 167,000 Euro.

- DBGlobe Project : IST Future and Emerging Technologies, European Commission. Data Management for Ubiquitous Computing. 2002 – 2003. Key Researcher (TUC PI) Budget: 35,000 Euro.
- DIET Project: IST Future and Emerging Technologies, European Commission. Ecosystem-inspired Information Retrieval. 2001 – 2003. Key Researcher. Budget: 60,000 Euro.
- EXAPSIS – smart storage systems._Funded by the Greek Government's Research and Technology Office._Project Coordinator. 1999 – 2001. Budget: 55 million Drachmas (approx. 160,000 Euro).
- HERMES Project, European Community, ESPRIT Long Term Research Program, no. 9141. Foundations for high-performance multimedia systems. April 1995 – March 1998. Co-Investigator. Budget: 50 Million Drachmas (~150,000 Euro).
- Natural Sciences and Engineering Research Council of Canada, NSERC. Project: Large-scale distributed systems. 1991 – 1994. Principal Investigator. Budget: \$33,000.

MAJOR ADMINISTRATIVE DUTIES

- *University of Warwick*
 - 1/2/2018 – Present: Head of Data Science and Machine Learning Research Theme. Created and currently leading this research theme.
 - 1/2/2018 – Present: Member of Research Strategy Committee.
- *University of Glasgow*
 - 2014 – 31/10/17: Associate Director, Urban Big Data Centre.
 - 2014 – 2015: Academic champion/leader for the new GU Data Centre.
 - 2013 – 2016: Member of Management Committee of the School of Computing Science.
- *University of Patras:*
 - 2010 – 2013: Member of the Executive Board of the Scientific Park of the University of Patras (responsible for policy setting and monitoring of spin-off companies at UP).
 - 2006 – Sept. 2010: Director, Software Division, CEID Department.
 - 2006 – Sept. 2010: Member of Dept.'s Financial Committee.
 - 2006 – present: Member of Graduate Studies Committee.
 - 2006 – Sept. 2010: Member of Dept's Executive Board.
- *Technical University of Crete:*
 - 1996 – 1997: Elected as the Dept's representative to the University Senate.
 - 1997 – 1998: Member of Dept's undergraduate committee.
 - 1998 – 1999: Member of Dept's undergraduate committee.
 - 1999 – 2000: Member of University's Library Committee.
 - 1999 – 2000: Elected as the Dept's representative to the University Senate.
- *Simon Fraser University:*
 - 1991 – 1992: Served in the Faculty Search Committee.
 - 1992 – 1993: Elected to the Departmental Tenure and Promotions Committee.
 - 1993 – 1994: Served in the Departmental Academic Appeals Committee.

JOURNAL PUBLICATIONS

1. Q. Ma and P. Triantafillou, "Query-Centric Regression", *Information Systems*, Elsevier, Accepted to Appear, 2021.
2. F. Savva, C. Anagnostopoulos, and P. Triantafillou, "Large-scale Data Exploration using Explanatory Regression Functions", in *ACM Transactions on Knowledge Discovery from Data, TKDD*, September 2020.
3. F. Savva, C. Anagnostopoulos and P. Triantafillou, "Adaptive Learning of Aggregate Analytics under Dynamic Workloads", *Future Generation Computer Systems*, August 2020, Pages 317-330.
4. C. Anagnostopoulos and P. Triantafillou, "Large-scale predictive modeling and analytics through regression queries in data management systems", *Int. Journal of Data Science and Analytics*, Springer, 2020.
5. C. Anagnostopoulos, F. Savva, and P. Triantafillou, "Scalable Aggregation Predictive Analytics: A Query-driven Machine Learning Approach", *Applied Intelligence*, Volume 48, Issue 9, pp 2546–2567, September 2018.

6. J. Wang, Z Liu, S. Ma, N. Ntarmos, and P. Triantafillou, "GC: A Graph Caching System for Subgraph / Supergraph Queries", *Proceedings of the VLDB Endowment*, (**PVLDB18**), vol. 11, no. 12, August 2018.
7. C. Anagnostopoulos and P. Triantafillou, "Query-Driven Learning for Predictive Analytics of Data Subspace Cardinality", *ACM Transactions on Knowledge Discovery from Data*, (**ACM TKDD**), vol. 11, no. 4, August 2017.
8. Chen, L., Zhang, H., Jose, J. M. , Yu, H., Moshfeghi, Y. and Triantafillou, P. "Topic detection and tracking on heterogeneous information". *Journal of Intelligent Information Systems*, p1-23, September 2017.
9. C. Anagnostopoulos, A. Cahsai, and P. Triantafillou, "Scalable Data Quality for Big Data: The Pythia Framework for Handling Missing Values", *Big Data journal*, September 2015, vol. 3, no. 3, pp159-172. (**Selected/Invited from KDD14 papers**).
10. F. Katsarou, N. Ntarmos, P. Triantafillou, "Performance and Scalability of Indexed Subgraph Query Processing Methods", *Proceedings of the VLDB Endowment*, (**PVLDB**), vol. 8, no. 12, August 2015, **Acceptance rate 21%**.
11. N. Ntarmos, I. Patlakas, P. Triantafillou, "Rank Join Queries in NoSQL Databases", *Proceedings of the VLDB Endowment*, (**PVLDB**), vol. 7, no. 7, March 2014, **Acceptance rate 20%**.
12. Anne-Marie Kermarrec and Peter Triantafillou, "XL Peer-to-Peer Pub/Sub", *ACM Computing Surveys*, December 2013.
13. Spyros Sioutas, George Papaloukopoulos, Evangelos Sakkopoulos, Kostas Tsihlias, Yannis Manolopoulos, Peter Triantafillou, ART: Sub-Logarithmic Decentralized Range Query Processing with Probabilistic Guarantees", *Distributed and Parallel Databases (DAPD)*, 31, (1), 2013.
14. Theoni Pitoura, Nikos Ntarmos, Peter Triantafillou, "Saturn: Range Queries, Load Balancing and Fault Tolerance in DHT Data Systems", *IEEE Transactions on Knowledge and Data Engineering*, (*IEEE TKDE*), 24, (7), 2012.
15. Ioannis Aekaterinidis, Peter Triantafillou, "Pyracanthus: A Scalable Solution for DHT-Independent Content-Based Publish/Subscribe Data Networks", *Information Systems*, 36, (3), 2011.
16. P. Triantafillou, "Anthropocentric Data Systems", 37th International Conference on Very Large Data Bases, *Proceedings of the VLDB*, (**PVLDB**), 4(12), 2011. **Acceptance rate 24%**. (**vision paper**).
17. Theoni Pitoura, Peter Triantafillou, "Distribution Fairness in Internet Scale Networks", *ACM Transactions on Internet Technology*, (**ACM TOIT**), vol. 9. no. 4, pages: 36, September 2009.
18. Nikos Ntarmos, Peter Triantafillou, and Gerhard Weikum, "Statistical Structures for Internet-Scale Data Management", *Very Large Data Bases Journal*, (**VLDBJ**), vol. 18, Issue 6 (2009), pp 1279-1312, Dec. 2009.
19. Thomas Neumann, Matthias Bender, Sebastian Michel, Ralf Schenkel, Peter Triantafillou and Gerhard Weikum, "Distributed top-k aggregation queries at large", *Distributed and Parallel Databases*, (**DAPD**) vol. 24, no. 1, August 2009, pp 3-27.
20. Nikos Ntarmos, Peter Triantafillou, and Gerhard Weikum, "Distributed Hash Sketches: Scalable, Efficient, and Accurate Cardinality Estimation for Distributed Multisets", *ACM Transactions on Computer Systems*, (**ACM TOCS**), vol. 27, issue 1, February 2009, 53 pages.
21. S. Sioutas, E. Sakkopoulos, Ch. Makris, B. Vassiliadis, A. Tsakalidis, P. Triantafillou, "Dynamic Web Service discovery architecture based on a novel peer based overlay network", *Journal of Systems and Software*, 82 (2009), pp. 809-824. Impact Factor: 1.24.
22. Manos Kapritsos and Peter Triantafillou, "BAD: Bandwidth Adaptive Dissemination", *IEEE Distributed Systems Online*, vol. 8, no. 11, 2007, (overview, selected from submissions to ACM/UNSENIX Middleware Conference 2007).
23. Ioannis Aekaterinidis, Peter Triantafillou, "Publish/Subscribe Information Delivery with Substring Predicates", *IEEE Internet Computing*, *Special Issue on Dynamic Information Dissemination*, July/August 2007.
24. Paraskevi Raftopoulou, Manolis Koubarakis, Kostas Stergiou and Peter Triantafillou. "Fair Resource Allocation in a Simple Multi-Agent Setting: Search Algorithms and Experimental Evaluation", *International Journal of Artificial Intelligence Tools*, (**IJAIT**), 2006.
25. P. Triantafillou, N. Ntarmos, and J. Yannakopoulos, "D.I.C.E.: A Cache Engine for e-Content Integration", *IEEE Internet Computing*, March/April 2004.
26. C. Harizakis, A. Hondroulis, and P. Triantafillou, "Optimal Memory Exploitation in Continuous Media Servers: To Cache or to Prefetch?" *Multimedia Tools and Applications journal*, (**MTAP**), 23:3, 2004.
27. E. Balafoutis, G. Nerjes, P. Muth, M. Paterakis, P. Triantafillou, and G. Weikum, "Clustered Scheduling Algorithms for Mixed-Media Disk Workloads", *Cluster Computing: The Journal of Networks, Software Tools and Applications*, special issue on Divisible Load Scheduling, vol. 6, num. 1, January 2003.
28. P. Triantafillou, R. Harpantidou, and M. Paterakis, "High Performance Data Broadcasting Systems", *ACM/Baltzer Mobile Networks and Applications journal* (MONET) special issue on *Pervasive Computing*, 7, 279-290, 2002.

29. P. Triantafillou, S. Christodoulakis, and C. Georgiadis, "A Comprehensive Analytical Performance Model for Disk-Storage Device Technologies under Random Workloads", *IEEE Transactions on Knowledge and Data Engineering*, (**IEEE TKDE**) vol. 14, no. 1, 140-155, 2002.
30. C. Georgiadis, P. Triantafillou, and C. Faloutsos, "Fundamentals of Scheduling and Performance of Robotic Tape Libraries in Video Server Environments", *Multimedia Tools and Applications Journal*, (**MTAP**), Kluwer Academic, 18, pp. 137-158, 2002.
31. P. Triantafillou, and T. Papadakis, "Continuous Data Block Placement and Elevation from Tertiary Storage in Hierarchical Storage Servers", *Cluster Computing: The Journal of Networks, Software Tools and Applications*, no. 4, 2001, pp.157-172.
32. P. Triantafillou, S. Christodoulakis, and C. Georgiadis, "Optimal Data Placement on Disks: A Comprehensive Solution for Different Technologies", *IEEE Transactions on Knowledge and Data Engineering* (**IEEE TKDE**) vol. 12, no. 2, March/April 2000.
33. C. Vassilakis, M. Paterakis, and P. Triantafillou, "Video Placement and Configuration of Distributed Video Systems Based on Cable TV Networks", *ACM/Verlag Multimedia Systems Journal*, vol. 8, no. 3, March 2000, pp. 92-104.
34. S. Harizopoulos, C. Harizakis, and P. Triantafillou, "Hierarchical Caching and Prefetching for High Performance Continuous Media Servers with Smart Disks", *IEEE Concurrency, Special Issue on Caching in Distributed Systems*, July-September 2000, pp. 16-22.
35. G. Nerjes, P. Muth, M. Paterakis, Y. Rombogiannakis, P. Triantafillou, and G. Weikum, "Incremental Scheduling for Mixed Workloads in Multimedia Information Servers", *Multimedia Tools and Applications*, (**MTAP**), Kluwer, vol. 11, no. 1, May 2000, p. 9-23.
36. P. Triantafillou and C. Faloutsos, "Overlay Striping for Optimal Parallel I/O in Modern Applications", *Parallel Computing Journal*, Special Issue on Parallel Data Servers and Applications, January 1998, pp 21-43.
37. P. Triantafillou, "An Approach to Deadlock Detection for Multidatabases", *Information Systems: An International Journal*, February 1997, vol. 22, no. 1, pp 39-55.
38. P. Triantafillou and C. Neilson, "Achieving Strong Consistency in a Distributed File System", *IEEE Transactions on Software Engineering*, (**IEEE TSE**), January 1997, vol. 23, no. 1, pp. 35-55.
39. P. Triantafillou, "Independent Recovery in Large-Scale Distributed Systems", *IEEE Transactions on Software Engineering*, (**IEEE TSE**), November 1996, vol. 22, no. 11, pp. 1-15.
40. P. Triantafillou, "Availability and Performance Limitations in Multidatabases", *Information Systems: An International Journal*, vol. 21, no. 7, pp. 577-593, 1996.
41. P. Triantafillou and D. J. Taylor, "VELO: A New Approach for Efficiently Achieving High Availability in Partitioned Distributed Systems". *IEEE Transactions on Knowledge and Data Engineering*, (**IEEE TKDE**), April 1996, pp. 305-321.
42. S. Christodoulakis and P. Triantafillou, "Research and Development Issues in Large-Scale Multimedia Systems", *ACM Computing Surveys*, Special Issue on Multimedia Information Systems, December 1995, pp. 75-79.
43. P. Triantafillou and D. J. Taylor, "The Location-Based Paradigm for Replication: Achieving Efficiency and Availability in Distributed Systems", *IEEE Transactions on Software Engineering*, (**IEEE TSE**), vol. 21, no. 1, January 1995, pp 1-18.
44. P. Triantafillou and D. J. Taylor, "Multi-Class Replicated Data Management: Exploiting Replication to Improve Efficiency", *IEEE Transactions on Parallel and Distributed Systems*, (**IEEE TPDS**), vol. 5, no. 2, February 1994, pp 121-138.
45. P. Triantafillou and M. A. Bauer, "Distributed Name Management in Internet Systems: A Study of Design and Performance Issues", *Journal of Parallel and Distributed Computing*, vol. 4, no. 9, August 1990, pp 357-368.

CONFERENCE PUBLICATIONS / PRESENTATIONS

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1. K. Zhao, M. Kurmanji, G. Barbulescu, E. Triantafillou, and P. Triantafillou, "What makes unlearning hard and what to do about it", in Advances in Neural Information Processing Systems (**NeurIPS24**), December 2024.
 2. K. Zhao and P. Triantafillou, "Scalability of Memorization-Based Machine Unlearning", NeurIPS24 FITML Workshop.
 3. G. Barbulescu and P. Triantafillou, "To Each (Textual Sequence) Its Own: Improving Memorized Data Unlearning in Large Language Models", International Conference in Machine Learning (**ICML24**), July 2024.
 4. M. Kurmanji, E. Triantafillou, and P. Triantafillou, "Machine Unlearning in Learned Database Systems: An Experimental Analysis", In Proc. ACM SIGMOD Conference on the Management of Data (**SIGMOD24**), June 2024.
 5. M. Kurmanji, P. Triantafillou, J. Hayes, and E. Triantafillou, "Towards Unbounded Machine Unlearning", in Advances in Neural Information Processing Systems (**NeurIPS23**), December 2023.

6. M. Kurmanji, P. Triantafillou, "Detect, Distill and Update: Learned DB Systems Facing Out of Distribution Data", In Proceedings ACM SIGMOD Conference on the Management of Data, (**SIGMOD23**), June 2023.
7. M. Shekelyan, G. Cormode, Q. Ma, A.M. Shanghooshabad, P. Triantafillou, "Streaming Weighted Sampling over Join Queries", In Proceedings **EDBT 2023**, March 2023.
8. George-Octavian Barbulescu and Peter Triantafillou, "Anatomy of Learned Database Tuning with Bayesian Optimization", In Proceedings of 13th International Workshop on Self-Managing Database Systems, (in conjunction with IEEE ICDE 2022), May 2022. (*Invited to special issue of Distributed and Parallel Databases journal*).
9. A.M. Shanghooshabad, M Shekelyan, Q. Ma, M. Kurmanji, M. Almasi, P. Triantafillou, "PGMJoins: Random Join Sampling with Graphical Models", In Proceedings ACM SIGMOD Conference on the Management of Data, (**SIGMOD21**), June 2021.
10. Q. Ma, A.M. Shanghooshabad, M. Kurmanji, M. Almasi, P. Triantafillou, "Learned Approximate Query Processing: Make it Light, Accurate and Fast", In Proc. 11th Conference on Innovative Data Systems, (**CIDR21**), January 2021.
11. F. Savva, C. Anagnostopoulos, and P. Triantafillou, "SuRF: Identification of Interesting Data Regions with Surrogate Models", In Proc. 36th IEEE International Conference on Data Engineering, (**ICDE20**), April 2020,
12. Q. Ma and P. Triantafillou, "Query-Centric Regression", In 22nd International Workshop on Design, Optimization, Languages and Analytical Processing of Big Data (DOLAP 2020), In conjunction with EDBT2020, March 2020. **Selected as one of the best and invited to submit to Information Systems journal.**
13. F. Savva, C. Anagnostopoulos, and P. Triantafillou, "Aggregate Query Prediction under Dynamic Workloads", In Proc. IEEE International Conference on Big Data, (**BigData19**), December 2019.
14. Q. Ma and P. Triantafillou, "DBEst: Revisiting Approximate Query Processing with Machine Learning Models", ACM SIGMOD International Conference on Management of Data, (**SIGMOD19**) June 2019. **Acceptance rate: 20%.**
15. Y. Moshfeghi, P. Triantafillou, F. Pollick, "Towards Predicting a Realisation of an Information Need based on Brain Signals", World Wide Web Conference, (**WWW, The Web Conference19**), May 2019. **Acceptance rate: 20%.**
16. A. Cahsai, C. Anagnostopoulos, N. Ntarmos, and P. Triantafillou, "Revisiting Exact kNN Query Processing with Probabilistic Data Space Transformations", In Proc. IEEE International Conference on Big Data, (**BigData18**), December 2018. **Acceptance rate: 19%. Best Student Paper Award** (among 500+ submissions).
17. F. Savva, C. Anagnostopoulos, and P. Triantafillou, "Explaining Aggregates for Exploratory Analytics", In Proc. IEEE International Conference on Big Data, (**BigData18**), December 2018. **Acceptance rate: 19%.**
18. P. Triantafillou, "Towards Intelligent Distributed Data Systems for Scalable Efficient and Accurate Analytics", In Proc. 38th IEEE International Conference on Distributed Computing Systems (**ICDCS18**), July 2018. (Vision and Blue Sky Thinking Track).
19. P. Triantafillou, "Data-Less Big Data Analytics (Towards Intelligent Data Analytics Systems)", In Proc. 34th IEEE International Conference on Data Engineering, (**ICDE18**), April 2018, (Lightning Talk).
20. F. Katsarou, N. Ntarmos, P. Triantafillou, "Hybrid Algorithms for Subgraph Pattern Queries in Graph Databases", In Proc. IEEE International Conference on Big Data, (**BigData17**), December 2017. **Acceptance rate: 18%.**
21. A. Cahsai, N. Ntarmos, C. Anagnostopoulos, and P. Triantafillou, "Scaling k-Nearest Neighbours Queries (the Right Way), in Proc. Of the 37th IEEE International Conference in Distributed Computing Systems (**ICDCS17**), June 2017.
22. C. Anagnostopoulos and P. Triantafillou, "Efficient Scalable Accurate Regression Queries in In-DBMS Analytics", In Proc. 33rd IEEE International Conference on Data Engineering, (**ICDE17**), April 2017. **Acceptance rate: 18%.**
23. Y. Moshfeghi, R. Rothfeld, L. Azzopardi, P. Triantafillou, "A Task Completion Engine to Enhance Search Session Support for Air Traffic Work Tasks", In Proc. European Conference on Information Retrieval, (**ECIR17**), March 2017.
24. J. Wang, N. Ntarmos, P. Triantafillou, "GraphCache: A Caching System for Graph Queries", 20th International Conference on Extending Database Technology, (**EDBT17**), March 2017. **Acceptance rate: 21%.**
25. F. Katsarou, N. Ntarmos, P. Triantafillou, "Subgraph Querying with Parallel Use of Query Rewritings and Alternative Algorithms", 20th International Conference on Extending Database Technology, (**EDBT17**), March 2017. **Acceptance rate: 21%.**
26. F. Katsarou, N. Ntarmos, P. Triantafillou, "Towards Hybrid Methods for Graph Pattern Queries: Combining Indexes with Subgraph Matching Algorithms", Sixth International Workshop on Querying Graph Structured Data (GraphQ 2017), with EDBT2017, March 2017.
27. Wang, N. Ntarmos, P. Triantafillou, "Ensuring Consistency in Graph Cache for Graph-Pattern Queries", Sixth International Workshop on Querying Graph Structured Data (GraphQ 2017), with EDBT2017, March 2017.
28. Y. Moshfeghi, P. Triantafillou, "Improving Search Results with Prior Similar Queries", The 25th ACM International Conference on Information and Knowledge Management, (**CIKM16**) November 2016.

29. Y. Moshfeghi, P. Triantafillou, and F. E. Pollick, "Understanding Information Need: An fMRI Study", 39th International ACM SIGIR Conference on Research and Development in Information Retrieval, (*SIGIR16*), July 2016. **Acceptance rate: 19%. Best Paper Award** (among 340+ submissions).
30. J. Wang, N. Ntarmos, P. Triantafillou, "Indexing Query Graphs to Speed Up Graph Query Processing", 19th International Conference on Extending Database Technology, (*EDBT16*), March 15-18, 2016.
31. C. Anagnostopoulos and P. Triantafillou, "Learning to Accurately COUNT with Query-Driven Predictive Analytics", In Proc. IEEE International Conference on Big Data, (*BigData15*), October 2015. **Acceptance rate: 16%.**
32. C. Anagnostopoulos and P. Triantafillou, "Learning Set Cardinality in Distance Nearest Neighbours", In Proc. IEEE International Conference on Data Mining, (*ICDM15*), November 2015. **Acceptance rate: 18%.**
33. J. Wang, N. Ntarmos, P. Triantafillou, "Towards a Subgraph/Supergraph Cached Query-Graph Index", In Proc. IEEE International Conference on Big Data, (*BigData15*), October 2015, (poster).
34. C. Anagnostopoulos and P. Triantafillou, "Scaling Out Big Data Missing Value Imputations", In Proc. ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (*KDD14*), August 2014. **Acceptance rate: 14%.**
35. S. Kumar Kondredi, P. Triantafillou, and G. Weikum, "Combining Information Extraction and Human Computing for Crowdsourced Knowledge Acquisition", In Proc. 30th IEEE International Conference on Data Engineering, April 2014, (*ICDE14*). **Acceptance rate: 20%.**
36. S. Kumar Kondredi, P. Triantafillou, and G. Weikum, "Human Computing Games for Knowledge Acquisition", In Proc. ACM Conference in Information and Knowledge Management, (*CIKM13*) October 2013 (demo paper).
37. S. Kumar Kondredi, P. Triantafillou, and G. Weikum, "Knowledge Acquisition Meets the Crowds", In Proc. 23rd International World-Wide Web Conference, (*WWW13*), May 2013, (PC-recommended poster), **Acceptance rate: 22%.**
38. G. Sfakianakis, Y. Patlakas, N. Ntarmos, P. Triantafillou, "Interval Indexing and Querying on Key-Value Cloud Stores", In Proc. 29th IEEE International Conference on Data Engineering, April 2013, (*ICDE13*). **Acceptance rate: 20%.**
39. S. Bedathur, K. Berberich, Y. Patlakas, P. Triantafillou, G. Weikum, "D-Hive: Data Bees Pollinating RDF and Text", In Proc. 6th Biennial Conference on Innovative Data Systems Research, (*CIDR13*), January 2013.
40. Dimitris Karampinas and Peter Triantafillou, "Crowdsourcing Taxonomies", 12th Extended Semantic Web Conference, (*ESWC12*) May 2012. Acceptance rate: 23%. [Recommended by all 3 reviewers for the best paper award].
41. Ch. Kaidos, A. Pasiopoulos, N. Ntarmos, P. Triantafillou, "SNFS: Design and Implementation of a Social Network File System", 4th Workshop on Social Network Systems (*SNS11*), April 2011 (in conjunction with *Eurosys* 2011).
42. Andreas Loupasakis, Nikos Ntarmos, Peter Triantafillou, "eXO: Decentralized Autonomous Scalable Social Networking", 5th Biennial Conference on Innovative Data Systems Research (*CIDR11*), January 2011.
43. Gerhard Weikum, Nikos Ntarmos, Marc Spaniol, Peter Triantafillou, Andras Benczur, Scott Kirkpatrick, Julien Masanes, Mark Williamson, "Longitudinal Analytics on Web Archive Data: It's About Time!", 5th Biennial Conference on Innovative Data Systems Research (*CIDR11*), January 2011. (**vision paper**).
44. Spyros Sioutas, George Papaloukopoulos, Evangelos Sakkopoulos, Kostas Tsihlias, Yannis Manolopoulos, Peter Triantafillou, "ART--sub-logarithmic decentralized range query processing with probabilistic guarantees", *ACM Symposium on Principles of Distributed Computing*, (*PODC10*), p. 118-119, Brief announcement, July 2010.
45. Thomas Neumann, Matthias Bender, Sebastian Michel, Ralf Schenkel, Peter Triantafillou, and Gerhard Weikum, "Optimizing Distributed Top-k Queries", *The Ninth International Conference on Web Information Systems Engineering* (*WISE08*), September 2008.
46. Theoni Pitoura, Peter Triantafillou, "Self-Join Size Estimation in P2P Data Systems", 24th International Conference on Data Engineering, (*ICDE08*), April 2008. **Acceptance rate: 12%.**
47. Manos Kapritsos and Peter Triantafillou, "BAD: Bandwidth Adaptive Dissemination", (Work in Progress (WiP) paper), *ACM/Usenix/IFIP 8th International Middleware Conference*, (*Middleware07*), November 2007. Acceptance rate: 26%.
48. Sebastian Michel, Matthias Bender, Peter Triantafillou, Gerhard Weikum, "Design Alternatives for Large-Scale Web Search: Alexander was Great, Aeneas a Pioneer, and Anakin has the Force. Workshop on Large scale Distributed Systems for Information Retrieval. Collocated with SIGIR July 2007. Amsterdam, Netherlands.
49. Theoni Pitoura, Peter Triantafillou, "Load Distribution Fairness in P2P Data Management Systems (the Gini vs the Bottle)", 23rd International Conference on Data Engineering, (*ICDE07*), April 2007. **Acceptance rate: 18%.**
50. Ioannis Aekaterinidis, Peter Triantafillou, "Substring Matching in P2P Content-based Publish/Subscribe Data Management Networks", 23rd IEEE International Conference on Data Engineering, (*ICDE07*), (short paper), April 2007. Acceptance rate: 27%.
51. Sebastian Michel, Matthias Bender, Nikos Ntarmos, Peter Triantafillou, Gerhard Weikum, Christian Zimmer, "Discovering and Exploiting Keyword and Attribute-Value Co-occurrences to Improve P2P routing Indices", 15th ACM

- International Conference on Information and Knowledge Management, (CIKM06)*, November 7-9, 2006. **Acceptance rate: 15%. Best paper award** (among 500+ submissions).
52. Ioannis Aekaterinidis, Peter Triantafillou, "PastryStrings: A Comprehensive Content-based Publish/Subscribe DHT Network", the 26th *IEEE International Conference on Distributed Computing and Systems, (ICDCS06)*, July 2006. **Acceptance rate: 13%.**
 53. S. Michel, M. Bender, P. Triantafillou, G. Weikum, "Global Document Frequency Estimation in Peer-to-Peer Web Search", Ninth International Workshop on the Web and Databases (**WebDB06**), in conjunction with ACM SIGMOD, June 2006, Acceptance rate: 25%.
 54. Theoni Pitoura, Nikos Ntarmos, Peter Triantafillou, "Replication, Load Balancing and Efficient Range Query Processing in DHTs", *10th International Conference on Extending Database Technology, (EDBT06)*, March 2006. **Acceptance rate: 15%.**
 55. M. Bender, S. Michel, P. Triantafillou, G. Weikum, "IQN Routing: Integrating Quality and Novelty in P2P Querying and Ranking", *10th International Conference on Extending Database Technology, (EDBT06)*, March 2006. **Acceptance rate: 15%.**
 56. N. Ntarmos, Peter Triantafillou, G. Weikum, "Counting at Large: Efficient Cardinality Estimation in Internet-Scale Data Networks", *22nd International Conference on Data Engineering, (ICDE06)*, April 2006. **Acceptance rate: 19%.**
 57. M. Bender, S. Michel, P. Triantafillou, G. Weikum, C. Zimmer, "P2P Content Search: Give the Web Back to the People", 5th International Workshop on Peer-to-Peer Systems", (**IPTPS06**), Feb. 2006. Acceptance rate: 25%.
 58. Ioannis Aekaterinidis, Peter Triantafillou, "Internet Scale String Attribute Publish/Subscribe Data Networks", *14th ACM International Conference on Information and Knowledge Management, (CIKM05)*, November 2005. **Acceptance rate: 17%.**
 59. S. Michel, P. Triantafillou, G. Weikum, "MINERVA[∞]: A Scalable Efficient Peer-to-Peer Search Engine", *ACM/IFIP/USENIX 6th International Middleware Conference, (Middleware05)*, November 2005. **Acceptance rate: 17%.**
 60. S. Michel, M. Bender, G. Weikum, C. Zimmer, P. Triantafillou, "P2P web search with MINERVA: How do you want to search tomorrow", (demo paper), *ACM/Usenix/IFIP 6th International Middleware Conference, (Middleware05)*, Nov-December 2005.
 61. Gerhard Weikum, David Hales, Christian Schindelhauer, Peter Triantafillou, "Towards Self-Organizing Query Routing and Processing for Peer-to-Peer Web Search", *European Conference on Complex Systems, (ECCS05)*, November 2005.
 62. Gerhard Weikum, Holger Bast, Geoffrey Canright, David Hales, Christian Schindelhauer, Peter Triantafillou, "Towards Peer-to-Peer Web Search", Workshop in Peer-to-peer Data Management in the Complex Systems Perspective, collocated with the European Conference on Complex Systems, **ECCS05**), November 2005.
 63. S. Michel, P. Triantafillou, G. Weikum, "KLEE: A Framework for Distributed Top-K Query Algorithms", *31st International Conference on Very Large Data Bases, (VLDB05)*, August 30 - September 2, 2005. **Acceptance rate: 16%.**
 64. M. Bender, S. Michel, P. Triantafillou, G. Weikum, C. Zimmer, "MINERVA: Collaborative P2P Web Search", *31st International Conference on Very Large Data Bases, (VLDB05)*, August 30 - September 2, 2005, demo paper.
 65. Nikos Ntarmos, Theoni Pitoura, Peter Triantafillou, "Range Query Optimization Leveraging Peer Heterogeneity in DHT Data Networks", *3rd International Workshop on Databases, Information Systems and Peer-to-Peer Computing, (DBISP2P05)* collocated with VLDB05, August 2005. Acceptance rate: 30%.
 66. Sebastian Michel, Peter Triantafillou, and Gerhard Weikum, "Approximate Top-k Query Algorithms over Widely Distributed Data Sources", *4th Hellenic Data Management Symposium*, Aug 25-26 2005, Athens Greece.
 67. Theoni Pitoura, Nikos Ntarmos, Peter Triantafillou, "Replication, Load Balancing and Efficient Range Query Processing in DHTs", *4th Hellenic Data Management Symposium*, August 25-26 2005, Athens Greece.
 68. M. Bender, S. Michel, P. Triantafillou, G. Weikum, C. Zimmer, "Improving Collection Selection with Overlap Awareness in P2P Search Engines", *28th International ACM SIGIR Conference, (SIGIR05)*, Aug. 2005. **Acceptance rate: 19%.**
 69. Ch. Makris, E. Sakkopoulos, S. Sioutas, P. Triantafillou, A. Tsakalidis, B. Vassiliadis, "NIPPERS: Network of InterPolated PeERS for Web Service Discovery", *IEEE Int. Conf. on Info. Technology: Coding and Computing*, April, 2005.
 70. N. Ntarmos, P. Triantafillou, "AESOP: Altruism-Endowed Self Organizing Peers", *2nd International Workshop on Databases, Information Systems and Peer-to-Peer Computing, (DBISP2P04)*, collocated with VLDB04, August 2004.
 71. N. Ntarmos, and P. Triantafillou, "SeAI: Managing Accesses and Data in Peer-to-Peer Data Sharing Networks", *4th IEEE International Conference in Peer-to-Peer Computing, (P2P04)*, August 2004, Acceptance rate: 23%.
 72. Nikos Ntarmos, Peter Triantafillou: SeAI: Selfishness and Altruism in Peer-to-Peer Data Sharing Networks. (**HDMS04**), June 2004.

73. Peter Triantafillou, Nikos Ntarmos, Theoni Pitoura: The RangeGuard: Range Query Optimization in Peer-to-Peer Data Networks. (**HDMS04**), June 2004.
74. P. Triantafillou, and A. Economides, "Subscription Summarization: A New Paradigm for Efficient Publish/Subscribe Systems", *IEEE International Conference on Distributed Computing and Systems, (ICDCS04)*, March 2004. **Acceptance rate: 13%** for the data management track (17% overall).
75. Peter Triantafillou, I. Aekaterinidis, "Publish/Subscribe over Structured P2P Networks", *3rd International Distributed Event-Based Systems, (DEBS04)*, May 2004. **Most Influential Paper Award** (awarded at ACM DEBS 2019).
76. Peter Triantafillou, "Self-Organization and Volunteering: Engineering in Very Large Scale Sharing Networks", *International Self-* Workshop on Self-* Properties in Complex Information Systems*, Bertinoro Italy, May-June 2004.
77. P. Triantafillou, T. Pitoura, "Towards A Unifying Framework for Complex Query Processing over Structured Peer-to-Peer Data Networks", *VLDB 2003 Workshop on Databases, Information Systems, and P2P Computing*, (**DBISP2P03**), September 2003.
78. P. Triantafillou, N. Ntarmos, and J. Yannakopoulos, "The HyperHotel Application built over DICE and COINS", *4th IEEE Web Information Systems Engineering, (WISE03) Conference*, December 2003. Acceptance rate: 25%.
79. P. Triantafillou, N. Ntarmos, and J. Yannakopoulos, "DICE and COINS: A Data Integration Cache Engine for a Content Integration System", *4th IEEE Web Information Systems Engineering (WISE03) Conference*, December 2003. Acceptance rate: 25%.
80. P. Triantafillou and I. Aekaterinidis, "ProxyTeller: A Proxy Placement Tool for Content Delivery under Performance Constraints", *4th IEEE Web Information Systems Engineering (WISE03) Conference*, December 2003. Acceptance rate: 25%.
81. P. Triantafillou, N. Ntarmos, S. Nikolettseas and P. Spirakis, "NanoPeer Networks and P2P Worlds", *3rd IEEE International Conference in Peer-to-Peer Computing, (P2P03)*, September 2003. Acceptance rate: 33%.
82. P. Triantafillou, "Peer-to-Peer Network Architectures: The Next Step (Harnessing the Symbiosis of Altruism and Selfishness)", *ACM SIGCOMM, Workshop on Future Directions in Network Architecture, (FDNA03)*, August 2003. Acceptance rate: 30%.
83. P. Triantafillou and I. Aekaterinidis, "ProxyTeller: A Tool Guiding Web Proxy Placement Decisions", *12th International World Wide Web Conference, (WWW2003)*, May 2003 (PC-recommended poster paper). **Acceptance rate: 20%**.
84. P. Triantafillou and I. Aekaterinidis, "Web Proxy Cache Replacement: Do's, Dont's, and Expectations", *2nd IEEE International Symposium on Network Computing and Applications, (NCA03)*, April 2003. Acceptance rate: 25%.
85. P. Triantafillou, C. Xiruhaki, M. Koubarakis, and N. Ntarmos, "Towards High Performance Peer-to-Peer Content and Resource Sharing Systems", *Conference on Innovative Data Systems Research, (CIDR03)*, January 2003.
86. P. Triantafillou and A. Economides, "Subscription Summaries for Scalability and Efficiency in Publish/Subscribe Systems", *1st Intl. IEEE Workshop on Distributed Event-based Systems, (DEBS02)*, July 2002.
87. P. Triantafillou, C. Xiruhaki, and M. Koubarakis, "Efficient Massive Sharing of Content among Peers", *IEEE Workshop on Resource Sharing in Massively Distributed Systems (RESH02)*, July 2002.
88. P. Triantafillou, A. Hondroulis, and C. Harizakis, "Optimal Memory Exploitation for Continuous Media: to cache or to prefetch", *7th International Workshop on Multimedia Information Systems, (MISO1)*, November 2001. (*selected as one of the best papers and invited for publication to the journal Multimedia Tools and Applications*).
89. P. Triantafillou, R. Harpantidou, and M. Paterakis, "High Performance Data Broadcasting: A Comprehensive Systems' Perspective" (or "The Non-issue of Broadcast Scheduling"), *2nd International Conference on Mobile Data Management, (MDM01)*, January 2001.
90. P. Triantafillou and Y. Georgiadis, "Hierarchical Scheduling Algorithms for Near-Line Robotic Tape libraries", *2nd IEEE Intern. Workshop on Parallel and Distributed Databases, (PaDD99)*, September 1999.
91. P. Triantafillou and S. Harizopoulos, "Prefetching into Smart Disk Caches for Improving the Performance of Continuous Media Servers", *IEEE Intern. Conference on Multimedia Computing and Systems, (ICMCS99)*, June 1999. **Acceptance rate 19%**.
92. Y. Rombogiannakis, G. Nerjes, P. Muth, M. Paterakis, P. Triantafillou, and G. Weikum, "Disk Scheduling for Mixed-Media Workloads in Multimedia Servers", *6th ACM International Multimedia Conference, (Multimedia98)*, September 1998. **Acceptance rate: 19%**.
93. G. Nerjes, Y. Robogianakis, P. Muth, M. Paterakis, P. Triantafillou, and G. Weikum, "Scheduling Strategies for Mixed Workloads in Multimedia Information Systems", *IEEE Workshop on Research Issues in Data Engineering, (RIDE98)*, on Continuous Media Databases, (*selected as one of the best papers and invited for publication to the journal Multimedia Tools and Applications*) February 1998.

94. P. Triantafillou, and T. Papadakis, "On-Demand Data Elevation in Hierarchical Multimedia Storage Servers", In Proceedings of *the 23rd International Conference on Very Large Data Bases, (VLDB97)*, August 1997, pp. 226-235. **Acceptance rate: 15%.**
95. S. Christodoulakis, P. Triantafillou, and F. Zioga, "Principles of Optimally Placing Data in Tertiary Storage Libraries", In Proceedings of *the 23rd International Conference on Very Large Data Bases, (VLDB97)*, August 1997, pp. 236-245. **Acceptance rate: 15%.**
96. G. Nerjes, Y. Rombogiannakis, P. Muth, M. Paterakis, P. Triantafillou, and G. Weikum, "Configuring and Performance Modeling of Multimedia Servers with Mixed Workload", *3rd International Workshop on Multimedia Information Systems, (MIS97)*, September 1997.
97. P. Triantafillou, S. Christodoulakis, and D. Magoulioti, "Benchmarking and Performance Fine-tuning of Multimedia Servers", In Proceedings of (**EUROPAR97**), workshop #18 on Distributed and Parallel Databases, August 1997.
98. C. Vassilakis, M. Paterakis, and P. Triantafillou, "Modeling, Design, and Performance Evaluation of Interactive Distributed Video-on-Demand Systems", *4th IEEE Workshop on High Performance Communication Systems, (HPCS97)*, June 1997. Acceptance rate: 33%.
99. P. Triantafillou and Feng Xiao, "Supporting Partial Data Accesses to Replicated Data", *10th IEEE International Conference on Data Engineering, (ICDE94)*, February 1994, Houston, Texas, pp 32-42. **Acceptance rate: 18%.**
100. P. Triantafillou, "Recovering in Large Distributed Systems with Replicated Data", Proceedings of *the 2nd International Conference on Parallel and Distributed Information Systems, (PDIS93)*, January 20-22, 1993, San Diego, California, pp 39-47. **Acceptance rate: 18%.**
101. P. Triantafillou, "High Availability is not Enough", Proceedings of *2nd Workshop on the management of Replicated Data* (IEEE Technical Committee on Operating Systems), November 12-13, 1992, Monterey, California, pp 40-44.
102. P. Triantafillou and D. J. Taylor, "Using Multiple Replica Classes to Improve Performance in Distributed Systems", 11th IEEE, *International Conference on Distributed Computing Systems, (ICDCS91)*, May 20-24, 1991, Arlington, Texas, pp 420-428. Acceptance rate: 25%.
103. P. Triantafillou and D. J. Taylor, "Efficiently Maintaining Availability in the Presence of Partitionings in Distributed Systems", *7th IEEE International Conference on Data Engineering, (ICDE91)*, April 8-12, 1991, Kobe, Japan, pp 34-41. Acceptance rate: 29%.
104. P. Triantafillou and D. J. Taylor, "A New Paradigm for High Availability and Efficiency in Replicated Distributed Databases", *2nd IEEE Symposium on Parallel and Distributed Processing, (SPDP90)*, December 9-13, 1990, Dallas, Texas, pp 136-143.

PROFESSIONAL ACTIVITIES & ACADEMIC LEADERSHIP

General Co-Chair:

- PVLDB 2025.

Advisory Board:

- *The Proceedings of the VLDB*, 2019 – 2023.

Scientific Advisory Board:

- *Huawei Research Centre*, Ireland, 03/20 – 05/21.

Associate Editor:

- *ACM International Conference in the Management of Data (SIGMOD)*, 2022.

Associate Director:

- *Urban Big Data Centre*, 2014 – 2017, a £10M-funded centre with ~50 researchers, technical, and admin personnel.

Steering Committee member:

- ACM/USENIX/IFIP *Middleware Conference*, 2012 – 2016.
- ALGO CLOUD Workshop: Algorithmic Aspects of Cloud Computing 2015 – present.

Organizing Committee:

- ACM CIKM Workshop: Understanding the City with Urban Informatics, October 2015.
- ALGO CLOUD Workshop: Algorithmic Computing, 15 – present.

Lead Guest Editor:

- *Journal of Internet Services and Applications*, Springer, *Special Thematic Series on Big Data*, 2015 and 2016.

Advisory Group Member, Urban Big Data Centre, 2017 – 2021.

Leader: ML by Systems for Systems group, at the Alan Turing Institute, September 2018 – July 2020.

REF2021 Research Excellence Framework: Member of Computing Science Panel, for the Criteria-Setting and Assessment Phases (2018 – 2021).

Program Committee (co-)Chair, Area Editor, Area-Vice Chair, General Chair:

1. Senior PC Member, **ICDE 2025**
2. Senior PC member: EDBT 2025
3. Senior PC Member, **EDBT 2024**.
4. PC Co-Chair IEEE Conference in Data Science and Advanced Analytics (Industrial Track) (**DSAA23**).
5. PC Associate Editor, **ACM SIGMOD 2022**.
6. PC Co-Chair: **PVLDB Reproducibility**, 2018 – present.
7. PC Co-Chair: International Workshop, Algorithmic Aspects of Cloud Computing (**ALGO CLOUD**), September 2015
8. PC Co-Chair: the 13th ACM/USENIX/IFIP **Middleware** Conference, December 2012.
9. PC Co-Chair: 11th Web Information Systems Engineering Conference, **WISE** December 2010.
10. PC Chair: **Middleware Doctoral Symposium** 2009.
11. PC Vice Chair: the 24th International Conference on Data Engineering (**ICDE08**), for the area *Distributed, Parallel, and Peer-to-peer Databases*.
12. PC Chair: the 5th Hellenic Data Management Symposium, September 2006.

Program Committee Member:

1. IEEE ICDE Conference in Data Engineering, Lightning Talks, **ICDE 2024**.
2. ACM International Conference on the Management of Data, **SIGMOD24**.
3. Conference on Extending Data Base Technology, (**EDBT23**), March 2020.
4. Conference on Innovative Data Systems Research (**CIDR22**), January 2022.
5. ACM International Conference on the Management of Data, (**SIGMOD2021**), June 2021.
6. 37th IEEE International Conference on Data Engineering, (**ICDE21**), April 2021.
7. 2021 Conference on Innovative Data Systems Research (**CIDR21**), January 2021.
8. (*Senior PC*) 23rd Conference on Extending Data Base Technology, (**EDBT20**), March 2020.
9. 2020 Conference on Innovative Data Systems Research (**CIDR20**), January 2020.
10. 2019 ACM/IFIP/USENIX **Middleware** Conference, December 2019.
11. 22nd Conference on Extending Data Base Technology, **EDBT19**, March 2019.
12. ACM Conference on Information and Knowledge Management, **CIKM18**.
13. 34th IEEE International Conference on Data Engineering, **ICDE18**, April 2018.
14. 21st Conference on Extending Data Base Technology, **EDBT18**, March 2018.
15. ACM International Conference on the Management of Data, **SIGMOD17** (Reproducibility PC).
16. PhD Symposium at ACM/USENIX/IFIP **Middleware** Conference, December 2017.
17. 20th Conference on Extending Data Base Technology, **EDBT17**, March 2017.
18. 17th ACM/USENIX/IFIP **Middleware** Conference, December 2016.
19. ACM International Conference on the Management of Data, **SIGMOD16** (Tutorials PC).
20. ACM International Conference on the Management of Data, **SIGMOD16** Reproducibility PC.
21. 19th Conference on Extending Data Base Technology, **EDBT16**, March 2016.
22. ACM CIKM 2015 Workshop on Understanding the City with Urban Informatics, October 2015.
23. 7th International Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications, November 9 – 11, 2015.
24. ACM International Conference on the Management of Data, **SIGMOD15** (Reproducibility PC).
25. 16th ACM/USENIX/IFIP **Middleware** Conference, December 2015.
26. ACM International Conference on Distributed Event-Based Systems, **DEBS15**, June 2015.
27. 18th Conference on Extending DataBase Technology, **EDBT15** March 2015.
28. 5th Temporal Web Analytics Workshop, TempWeb15, with WWW 2015, May 2015.
29. 15th ACM/USENIX/IFIP **Middleware** Conference, December 2014.
30. ACM International Conference on Distributed Event-Based Systems, **DEBS14**, June 2014.
31. 13th Web Information System Engineering Conference **WISE** 2014, 2014.
32. 4th Temporal Web Analytics Workshop (TempWeb 2014), with WWW 2014, April 2014.
33. International Conference on Principles of Distributed Systems, OPODIS, December 2013.
34. 14th ACM/USENIX/IFIP **Middleware** Conference, December 2013.

35. ACM International Conference on Distributed Event-Based Systems, **DEBS13**, June 2013.
36. IEEE International Conference on Distributed Computing and Systems, **ICDCS13**, (Operating Systems and Middleware).
37. 6th Biennial Conference on Innovative Data Systems Research **CIDR13**, January 2013.
38. 13th Web Information System Engineering Conference, **WISE13**, 2013.
39. 12th Web Information System Engineering Conference **WISE12**, 2012.
40. 3rd Temporal Web Analytics Workshop (TempWeb 2013), with SIGIR 2013.
41. 38th International Conference on Very Large Data Bases, **VLDB12**, Research Track, August 2012.
42. 38th International Conference on Very Large Data Bases, **VLDB12**, Experiments and Analysis Track, August 2012.
43. International Conference on Scientific and Statistical Database Management, **SSDBM12**.
44. IEEE International Conference on Distributed Computing and Systems, June 2012, **ICDCS12**, (Fault-Tolerance and Dependability).
45. 2nd Temporal Web Analytics Workshop (TempWeb 2012), with WWW 2012, April 2012.
46. 12th ACM/USENIX/IFIP **Middleware** Conference, December 2011.
47. 12th Web Information System Engineering Conference, **WISE11**, October 2011.
48. 11th Hellenic Data Management Symposium, June 2011.
49. 1st International Temporal Web Analytics Workshop (TAWW) March, 2011, in conjunction with the World Wide Web, WWW2011.
50. IEEE International Conference on Distributed Computing and Systems, June 2011, **ICDCS11**, (Operating Systems and Middleware).
51. 15th Pasific-Asia Conference on Knowledge Discovery and Data Mining, **PAKDD11**, May 2011.
52. Eurosys Roger Needham PhD Award Committee, April 2011.
53. International Conference on extending Data Base Technology, March 2011 **EDBT11**, 2011.
54. 11th ACM/USENIX/IFIP **Middleware** Conference, December 2010.
55. ACM/USENIX/IFIP Middleware Doctoral Symposium, December 2010.
56. 9th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE 2010), October 2010.
57. 29th Annual ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing, **PODC10**.
58. 10th Hellenic Data Management Symposium, August 2010.
59. International Conference on extending Data Base Technology, **EDBT10**, March 2010.
60. 26th IEEE International Conference on Data Engineering, **ICDE10**, March 2010.
61. 10th ACM/USENIX/IFIP **Middleware** Conference, December 2009.
62. 4th ACM International Conference on Distributed Event-Based Systems, **DEBS10**, June 2010.
63. 9th IEEE Conference on Peer-to-Peer Computing, **P2P09**, September 2009.
64. 3rd ACM International Conference on Distributed Event-Based Systems, **DEBS09**, June 2009.
65. Workshop on "Location-based services and applications" (LBSA), with ICPP'09.
66. International Conference on extending Data Base Technology, **EDBT09** March 2009.
67. 9th Hellenic Data Management Symposium, August 2009.
68. 25th IEEE International Conference on Data Engineering, **ICDE09**, March 2009.
69. 8th Hellenic Data Management Symposium, July 2009.
70. 8th IEEE Conference on Peer-to-Peer Computing, **P2P08**, September 2008.
71. 9th ACM/USENIX/IFIP **Middleware** Conference, December 2008.
72. 11th International Conference Extending Database Technology, **EDBT08**, March 2008.
73. 1st International Conference Distributed Event-Based Systems, **DEBS07**, June 2007.
74. Panhellenic Conference on Informatics, 2007.
75. Hellenic Data Management Symposium, 2007.
76. ACM/USENIX/IFIP 8th Middleware Conference, November 2007.
77. 7th IEEE Conference on Peer-to-Peer Computing, **P2P07**, September 2007.
78. Database Management and Application over Networks (DBMAN 2007) workshop.
79. Database and Expert System Applications International Conference, DEXA 2007.
80. P2P Systems for Collaboration Workshop, with the CTS 2007 Symposium.
81. 4th International Conference on Autonomic and Trusted Computing, ATC07, July 2007.
82. 15th ACM Conference on Information and Knowledge Management, **CIKM06**, November 2006.

83. International Workshop on Databases, Information Systems and Peer-to-Peer Computing, DBISP2P, September 2006 (collocated with VLDB-2006).
84. 6th IEEE International Conference on Peer-to-Peer Computing, **P2P06**, August 2006.
85. International Workshop on Agents and Peer-to-Peer Computing, AP2PC06, collocated with the Autonomous Agents and Multi-Agent Systems (AAMAS) May 2006.
86. 32nd International Conference on Very Large Data Bases, **VLDB06**, September 2006.
87. 12th ACM-SIGKDD International Conference on Knowledge Discovery and Data Mining **KDD06**.
88. 10th International Conference on Extending Database Technology, **EDBT06**, March 2006.
89. ACM/IFIP/USENIX International Middleware Conference, **Middleware05**, November/December 2005.
90. 6th International Workshop on Advanced Parallel Processing Technologies, October 27-28, 2005.
91. 5th IEEE International Conference on Peer-to-Peer Computing, **P2P05**, August 2005.
92. International Workshop on Agents and Peer-to-Peer Computing, AP2PC05, collocated with the Autonomous Agents and Multi-Agent Systems (AAMAS) July 2005.
93. 4th International ACM Workshop on Data Engineering for Wireless and Mobile Access, MobiDE'05, June 2005.
94. International Workshop on "Distributed Event-Based Systems", **DEBS05**, (collocated with ICDCS-2005), June 2005.
95. IEEE International Conference on Web Information Systems Engineering, WISE 2005.
96. IEEE International Conference on Pervasive Services, July 2005.
97. 5th IEEE Workshop on Algorithms for Wireless, Mobile, Ad Hoc and Sensor Networks, with IPDPS 2005.
98. **VLDB '05** International Conference - Demonstrations Track, August 2005.
99. International Workshop on Databases, Information Systems and Peer-to-Peer Computing, DBISP2P, August – September 2005 (collocated with VLDB-2005).
100. 10th Panhellenic Conference on Informatics, 2005.
101. 4th Hellenic Data Management Symposium, 2005.
102. IEEE International Conference on Data Engineering, **ICDE05**, March 2005.
103. 2nd International Workshop on Metadata Management in Grid and P2P Systems, December 2004.
104. International Workshop on Databases, Information Systems and Peer-to-Peer Computing, DBISP2P, August – September 2004 (collocated with VLDB-2004).
105. 4th IEEE International Conference on Peer-to-Peer Computing, **P2P04**, August 2004.
106. International Workshop on "Distributed Event-Based Systems", **DEBS04**, (with ICSE-2004).
107. 3rd Hellenic Data Management Symposium, June 2004.
108. International Workshop on Agents and Peer-to-Peer Computing, AP2PC04, collocated with the Autonomous Agents and Multi-Agent Systems (AAMAS 2004).
109. ACM/IFIP/USENIX International Middleware Conference, **Middleware04**, October 2004.
110. 1st International Workshop on Algorithmic Aspects of Wireless Sensor Networks (ALGOSENSORS) in conjunction with ICALP 2004, July 2004,
111. ACM International Conference on the Management of Data, ACM **SIGMOD04**, June 2004.
112. 5th International Conference on Web Information Systems Engineering, WISE 2004.
113. IEEE International Conference on Data Engineering (ICDE), PhD Workshop, March 2004.
114. EDBT, International Conference on Extending Database Technology, PhD Workshop, 2004.
115. International Workshop on Databases, Information Systems and Peer-to-Peer Computing Berlin, September 8, 2003 (collocated with VLDB-2003).
116. International Workshop on Multimedia Information Systems, MIS 2003, May 2003.
117. International Workshop on "Distributed Event-Based Systems", **DEBS03**, June 8 2003, (collocated with SIGMOD-2003).
118. International Workshop on Agents and Peer-to-Peer Computing, 2003, collocated with the Autonomous Agents and Multi-Agent Systems (AAMAS) International Conference.
119. 1st Balkan Conference on Computer Science, 2003.
120. Hellenic Computer Science Conference, 2003.
121. International Workshop on Agents and Peer-to-Peer Computing, July 2002, with the Autonomous Agents and Multi-Agent Systems (AAMAS) International Conference.
122. ACM MobiDE'2001 (ACM Int. Conference on Mobile Data Engineering) May 2001.
123. Database and Expert System Applications, International Conference, DEXA 2000, September 2000.
124. 7th International Conference on Extending Database Technology, **EDBT00**, March 2000.

125. ACM Data Engineering for Mobile Access Conference, MobiDE'99, September 1999.
126. ACM International Conference on the Management of Data, ACM **SIGMOD99**, May 1999.
127. Foundations for Data Organization and Algorithms Conference, FODO'98, November 1998.
128. 6th International Conference on Extending Database Technology, **EDBT98**, March 1998.
129. Eighth International IEEE Workshop on Research Issues in Data Engineering: Continuous-Media Databases and Applications, RIDE98, February 1998.

SELECTED OTHER PROFESSIONAL ACTIVITIES

- **Keynote speaker**: Future Technologies Conference, November 2024.
- **Keynote speaker**: ALGO CLOUD Symposium, September 2024.
- **Invited Speaker**: Microsoft Research Centre, Gray Systems Lab, September 2024.
- **Invited Speaker**, Huawei Ireland Research Centre, Dublin, June 2024.
- External **Adviser/Evaluator** for the Research Assessment Exercise, Chinese University of Hong Kong, 2024.
- External **Adviser/Evaluator** for the Research Assessment Exercise, Hong Kong Baptist University, 2024.
- External **Adviser/Evaluator** for the Research Assessment Exercise, University of Hong Kong, 2023.
- **Invited Speaker**, Huawei Edinburgh Research Centre, Edinburgh, June 2023.
- **Member of Committee** for **Test of Time Award**: EDBT 2017.
- **External Examiner**, MSc in Data Science, Lancaster University, 2018 – Present.
- **External Examiner**, Internal REF2021 (Computer Science), Queen's University Belfast, September 2017.
- **External Assessor**, Global Talent Programme (Data Sciences) University of Strathclyde, November 2017.
- **Invited Panel Member**, Panelist in PhD Symposium at ICDE 2017, April 24, 2017.
- **Invited Speaker**, Case Western Reserve University, March 2017.
- **Invited Speaker**, the Scottish Competition Forum event on Big Data, February 2017.
- **Invited Speaker**, INRIA/Technicolor Event on Big Data, Rennes, France, November 2016.
- **Invited Speaker**, "Bridging European Urban Transformations – (Un)Plugging Data in Smart Cities" Workshop, Brussels, November 2016.
- **Invited Speaker**, Huawei Research Centre, Toronto, June 2016.
- **Invited Speaker**, University of California, Riverside, March 2016.
- **Invited Tutorial**, ALGO2015 on Performance and Scalability in Graph Queries, September 2015.
- **Invited Distinguished Speaker**, Lancaster University, UK – March 2015.
- **Invited Speaker**, International Colloquium in Data Science, Ecole Polytechnique Paris, November 2014.
- **Member of Expert Committee**, Canada Innovation Fund -- evaluation of funding proposals.
- **Invited Speaker**, IBM Big Data Analytics Colloquium, March 2014 London UK.
- **Invited Speaker**, Google Focused Awards Workshop on Personalization and Big Data, EPFL Switzerland, January 2014.
- **Keynote Speaker**, SICSA Summer School on Big Data, July 2013, St Andrews, UK.
- **Invited Speaker**, Summer School on Technologies for Realizing Social Networks and Applications August 21, 2011, Norway.
- **Keynote Speaker**, Workshop on Social Networks and Distributed Systems collocated with the 29th ACM/SIGACT PODC, July 2010, Zurich.
- **Invited Speaker**, INRIA 2nd winter school on "**Hot Topics in Distributed Computing**" March 2009.
- **Tutorial** at ACM/USENIX International Conference on Middleware, **Middleware08**, on "Peer-to-peer Publish/Subscribe", December 2008.
- **Tutorial** at IEEE International Conference on Distributed Event-based Systems, DEBS08, on "Large-scale Publish/Subscribe Systems", July 2008.
- **Invited Talk**, INRIA, Rennes, on "Intern-scale load balancing metrics", September 2008.
- **Invited Talk**, Max-Planck Institute for Informatics, on "Distributed Hash Sketches", July 2008.
- **Invited Speaker**, EXYSTENCE European Centre of Excellence on Trust-based Networking, ETH-Zurich, March 2006.
- **Panel participant**, EDBT 2006 on Social Networking meets Databases.
- **Invited Speaker**, ACM SIGCOMM Workshop on Future Directions in Network Architecture, (FDNA-03), on "Peer-to-Peer Network Architectures: The Next Step (Harnessing the Symbiosis of Altruism and Selfishness)", August 2003.

- **Keynote Speaker**, Tales of the Disappearing Computer on Peer-to-Peer Networks: Architectures, Algorithms, and Performance, June 1 2003 Santorini, Greece.
- **Panelist**, 3rd International Workshop on Multimedia Information Systems, September 1997, Italy.
- Have taught a course and consulted on the design and implementation of UNIX-based operating systems with McDonald, Detweiler and Associates, a high-tech company in Vancouver, Canada.
- Have served as a referee for research monographs for the IEEE Computer Society Press, and for research articles for most relevant journals including: ACM Transactions on Computer Systems, ACM Transactions on Database Systems, ACM Transactions on the Web, ACM/Verlag Multimedia Systems, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on Multimedia, International Journal on Very Large Data Bases, the Computer Journal, Information Systems: An International Journal, and for a large number of international conferences.
- Served as a **panelist** at the 2nd IEEE Workshop on the Management of Replicated Data sponsored by the IEEE Technical Committee on Operating Systems, Monterey California, November 1992.

MENTORING

Highlights: Former supervisee students of mine (for their 5th year of Undergraduate Studies Dissertation or their MSc Thesis) include an Associate Professor at Harvard University (Stratos Idreos), an Assistant Professor at University of Michigan (Manos Kapritsos), and a Senior Software Architect at Facebook (Stavros Harizopoulos).

Post-Doctoral Researchers:

1. Dr. Merhad Almasi (2020 – 2022)
2. Dr. Michael Shekelyan (co-supervised with Graham Cormode) (2019 – 2020)
3. Dr. Yashar Moshfeghi (now Lecturer at Strathclyde University).
4. Dr. Christos Anagnostopoulos (now Senior Lecturer at Glasgow University).
5. Dr. Nikos Ntarmos (now Senior Lecturer at Glasgow University and Lab Director at Huawei Research, Edinburgh).
6. Dr. Theoni Pitoura (now at University Hospital, Patras).
7. Dr. Yannis, Aikaterinides (now at Technological Institute Crete).

PhD Students:

1. George Barbulescu, PhD expected 2027.
2. Kairan Zhao, PhD expected 2026.
3. Meghdad Kurmanji PhD 2024 – now postdoc at University of Cambridge.
4. Ali Mohammadi Shanghooshabad. PhD 2022 (now at Oracle Labs, Heatwave).
5. Qingzhi Ma, PhD Fall 2021 (now at Soochow University, China).
6. Fotis Savva, Query-Centric Analytics, PhD, December 2020 (now at Oracle Labs).
7. Atoshum Cahsai, Nearest-Neighbour Queries in Data-Intensive Systems. January 2019 (now at ARM, UK).
8. Foteini Katsarou, Scaling Graph Pattern Queries in Graph Databases. April 2018 (now at Cadence Design Systems, UK).
9. Jing Wang, GraphCache: A Query Caching System in Graph Databases. June 2017 (now at Beijing Advanced Innovation Center for Big Data and Brain Computing, Behang University, China).
10. N. Ntarmos, Monitoring and Statistics in P2P Data Systems. February 2008.
11. I. Aekaterinides, Publish-Subscribe Systems on P2P Data Networks. May 2008.
12. Theoni Pitoura, Range Query Processing, Distribution Fairness, and Self-Join Size Estimation in Peer-to-Peer Data Systems. September 2008.

MSc Research Students:

1. G. Sfakianakis, Interval Data Indexing on Clouds. November 2012.
2. D. Karampinas, Crowdsourcing Taxonomies. Degree Completed: February 2012.
3. O. Vlachoyanni, Social Network Integrated Search and Indexing. February 2012.
4. I. Patlakas, Ranked Join Queries in Decentralized Cloud Stores. February 2012.
5. A. Pasiopoulos, Social Organic File Systems. December 2011.
6. I. Kontotasiou, Optimal Ranked Retrieval with Taxonomies. January 2012.
7. A. Loupasakis, Decentralized Social Networks: Architecture, Indexing, and Retrieval. February 2011.

8. M. Kapritsos, Application-level Multicasting in P2P Systems. 2007.
9. N. Ntarmos, Harnessing Selfish and Altruistic Behavior in P2P Systems. 2004.
10. C. Xiruhaki, Load Distribution and Resource Exploitation in P2P Systems. 2003.
11. A. Economides, Summarization Structures for Efficiency and Scalability in Pub/Sub Systems. 2003.
12. I. Aekaterinides, Web Proxy Replacement and Placement Algorithms. March 2003.
13. C. Harizakis, Internet Delivery of Continuous Data. 2003.
14. R. Harpantidou, A System's Perspective for Broadcast Scheduling. 2000.
15. Yannis Robogiannakis, Scheduling and Modeling Mixed-Workload Multimedia Servers. 1998.
16. Costas Georgiadis, Performance Analysis of Disk Storage Devices. 1998.
17. Theodora Magoulioti, Benchmarking Multimedia Systems. 1998.
18. Carl Neilson, Distributed File Systems. 1993.

SOFTWARE SYSTEM DEVELOPMENT

I have been principally involved in the architecture/design/development of several software systems. As an example, the following are mentioned:

Key architect / designer / developer of several software systems:

- DBEst/DBEst++: An Approximate Query Processing Engine, based on Machine Learning Models (on-going).
- GraphCache: A Graph Cache System for Graph Pattern Queries.
- eXO: Decentralized Social Networking.
- DHS: Distributed Hash Sketches and SHADE: Building upon DHS to support aggregation Queries
- NOVA and BAD: Application-level multicast infrastructure for scalable data delivery.
- MINERVA: Decentralized search engine (with colleagues from the Max-Planck Institute of Informatics).
- ProxyTeller: Optimize the performance of internet content delivery with proxy placement.
- COINS: Content Integration System using caching at mediators to integrate Internet content.
 - Resulted in a commercial product, integrating the web presence of hotels in Western Greece.
- ARF: A distributed file system.

TEACHING

- University of Warwick:
 - Database Systems
 - Advanced Database Systems
- University of Glasgow:
 - Database Systems
 - Big Data Systems
- University of Patras:
 - Operating Systems I
 - Operating Systems II
 - Operating Systems Laboratory
 - Web Systems
 - Internet-Scale Data Systems.
- Technical University of Crete:
 - Operating Systems
 - Distributed Systems
 - Parallelism and Distribution in Multimedia Storage Server
 - Data Structures
- Simon Fraser University:
 - Operating Systems II
 - Operating Systems Laboratory
 - Distributed Systems
 - Database Systems
 - Highly-Available Distributed File Systems