

PANOS K. CHRYSANTHIS

Department of Computer Science
University of Pittsburgh
Pittsburgh, PA 15260

E-Mail : panos@cs.pitt.edu
Web : <http://panos.cs.pitt.edu>
Office : 412.624.8924, Fax : 412.624.8854

RESEARCH INTERESTS

Management of Data (Big Data, Databases, Web Databases, Data Streams & Sensor networks),
Cloud, Distributed & Mobile Computing, Workflow Management, Operating & Real-time Systems

EDUCATION

Ph.D. in Computer and Information Science, University of Massachusetts, Amherst, August 1991

M.S. in Computer and Information Science, University of Massachusetts, Amherst, May 1986

B.S. in Physics (Computer Science concentration), University of Athens, Greece, December 1982

APPOINTMENTS

Professor, Dept. of Computer Science (Joint-Secondary appointment in Electrical Engineering and the Telcomm Program), University of Pittsburgh (Jan. 2004 to present).

Visiting Professor, Dept. of Computer Science, Carnegie Mellon University, Pittsburgh (Aug. 1999 to Aug. 2000; Dec. 2015 - present)

Adjunct Professor, Dept. of Computer Science, Carnegie-Mellon University (Aug. 2000 to present).

Adjunct Professor, Dept. of Computer Science, University of Cyprus, Cyprus (Jan 2008 to Dec. 2014).

Faculty member, Computational Biology PhD Program, University of Pittsburgh and Carnegie-Mellon University (Sept. 2004 to present).

Visiting Professor, Dept. of Computer Science, University of Cyprus, Cyprus (Aug. 2006 to June 2007).

Faculty Member, RODS Laboratory, Center for Biomedical Informatics, University of Pittsburgh (May 2002 to Aug. 2006).

Associate Professor, Dept. of Computer Science (Joint-Secondary appointment in Electrical Engineering), University of Pittsburgh (Sept. 1997 to Dec. 2003).

Assistant Professor, Dept. of Computer Science, University of Pittsburgh (Sept. 1991 to Aug. 1997).

Assistant Professor (Joint-Secondary appointment), Dept. of Electrical Engineering, University of Pittsburgh (Sept. 1996 to Aug. 1997).

Visiting Professor, Dipart. di Informatica e Sistemistica, Universita di Roma "La Sapienza," Italy (July 1994).

Visiting Research Faculty, Dept. of Computer Science, University of Massachusetts (June 1992 and July 1993).

HONORS and AWARDS

Honorary Visiting Professorship, University of Diaspora, University of Cyprus (May 2016)

Provost Award for Excellence in Mentoring, University of Pittsburgh (April 2015)

ACM Distinguished Scientist (October 2010).

ACM Senior Member (December 2007).

IEEE Computer Society Senior Member (June 2006).

National Science Foundation CAREER Award (July 1995).

Computer Science Teaching Award, University of Pittsburgh, for effectiveness in teaching of a foundation graduate course during 2013-14.

Computer Science Teaching Award, University of Pittsburgh, for effectiveness in teaching of an advanced graduate course during 2008-09.

Computer Science Teaching Award, University of Pittsburgh, for effectiveness in teaching of a graduate (elective) course during 1994-95.

Computer Science Teaching Awards, University of Pittsburgh, for effectiveness in teaching of an undergraduate (service) course during 1994-95, during 1995-96, 1996-97, and 1998-99.

Research Fellow of Information Systems, The Athens Laboratory of Business Administration, Greece (Jan. 1995)

Nominee for the ACM Doctoral Dissertation Award (July 1992): Selected by the University of Massachusetts at Amherst as the best doctoral dissertation in Computer Science in 1991.

Graduate Studies Scholarship: Department of Computer and Information Science, University of Massachusetts, Amherst, USA (Sept '83 to Aug '91).

State Scholarship Institute of Greece: Honorary Scholarships for academic performance during 1979-80 and 1980-81.

BOOK

1. K. Ramamritham and P. K. Chrysanthis. *Advances in Concurrency Control and Transaction Processing*, IEEE Computer Society Press, 1997.

BOOK CONTRIBUTIONS

1. P. K. Chrysanthis and K. Ramamritham. "Extended Transaction Models and the ACTA Framework." *Encyclopedia of Database Systems*, pp. 1091-1092, 2009.
2. D. Zeinalipour-Yazti and P. K. Chrysanthis. "Mobile Sensor Network Data Management." *Encyclopedia of Database Systems*, pp. 1755-1759, 2009.
3. K. Ramamritham and P. K. Chrysanthis. "Semantics-based Concurrency Control." *Encyclopedia of Database Systems*, p. 2591, 2009.
4. P. K. Chrysanthis and E. Pitoura. "Data Broadcasting, Caching and Replication in Mobile Computing." *Encyclopedia of Database Systems*, pp. 557-561, 2009.
5. S. Papastavrou, G. Samaras, P. Evripidou and P. K. Chrysanthis. "Dynamically Generated Web Content: Research and Technology Practices", *Web Data Management Practices: Emerging Techniques and Technologies*, Athena Vakali and George Pallis (Eds), Sept. 2006.

6. P. K. Chrysanthis, K. Pruhs and V. Liberatore. "Middleware for Scalable Data Dissemination". (Ch. 11) *Middleware for Communications*, Qusay H. Mahmoud ed., John Wiley & Sons, June 2004.
7. V. Zadoronzhny and P. K. Chrysanthis. "Locations-based Query Processing." In *H. Karma and A. Hammad (Editors), Telegeoinformatics: Location Based Computing and Services*, Taylor & Francis, London, Mar. 2004.
8. P. K. Chrysanthis and K. Ramamritham. "Correctness Criteria and Concurrency Control." (Ch. 9) *Management of Heterogeneous and Autonomous Database Systems*, A.K. Elmagarmid, M. Rusinkiewicz and A. Sheth, eds., pp. 253–276, Morgan Kaufmann, 1999.
9. P. K. Chrysanthis, G. Samaras and Y. J. Al-Houmaily. "Recovery and Performance of Atomic Commit Protocols in Distributed Database Systems." (Ch. 13) *Recovery in Database Management Systems*, V. Kumar and M. Hsu, eds., pp. 370–416, Prentice Hall, 1998.
10. P. K. Chrysanthis. "Serializability-based Correctness Criteria." (Ch. 2) *Performance of Concurrency Control Mechanisms in Centralized Database Management Systems*, V. Kumar, ed., Prentice Hall, 1995, pp. 7–29.
11. P. K. Chrysanthis and K. Ramamritham. "ACTA: a framework for specifying and reasoning about transaction structure and behavior." *Readings in Database Systems, 2nd edition*, M. Stonebraker, ed., Morgan Kaufmann, 1994, pp. 335–344. (First published in *Proceedings of the 1990 ACM SIGMOD International Conference on the Management of Data*, pp. 194–203.)
12. K. Ramamritham and P. K. Chrysanthis. "In Search for the Acceptability Criteria: Database Consistency Requirements and Transaction Correctness Properties," *Distributed Object Management*, T. Özsu, U. Dayal, and P. Valduriez, eds., Morgan Kaufmann Publishers, 1993, pp. 212–230. (First version published in *the Proceedings of the International Workshop on Distributed Object Management*, pp. 211–229, Canada, August 1992.)
13. P. K. Chrysanthis and K. Ramamritham. "ACTA: The SAGA Continues." (Ch. 10) *Database Transaction Models for Advanced Applications*, A. K. Elmagarmid, ed., Morgan Kaufmann Publishers, 1992, pp. 349–398.

JOURNAL PUBLICATIONS

1. T. N. Pham, P. K. Chrysanthis, A. Labrinidis. "Avoiding class warfare: Managing Continuous Queries with Differentiated Classes of Service." *The International Journal on Very Large Data Bases (VLDBJ)*, 25(2):197221, Nov 2015.
2. R. Rexit, F. Tsui, J. Espino, P. K Chrysanthis, S. Wesaratchakit, Y. Ye. "An Analytics Appliance for Identifying (Near) Optimal Over-the-Counter Medicine Products as Health Indicators for Influenza Surveillance." *Information Systems Journal (InfoSys)*, May 2014.
3. M. K. Iskander, D. Wilkinson, T. Trainor, A. J. Lee, and P. K. Chrysanthis, "Balancing Performance, Accuracy, and Precision for Secure Cloud Transactions." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 25(2):417-426, Feb. 2014.
4. S. Papastavrou, P. K. Chrysanthis and G. Samaras. "Performance Vs. Freshness in Web Database Applications." *WWW Journal*, Nov. 2013.

5. A. Konstantinidis, D. Zeinalipour-Yazti, P. Andreou, G. Samaras, P. K. Chrysanthis. "Intelligent search in social communities of smartphone users." *Distributed and Parallel Databases (DAPD)*, 31(2):115-149, Feb. 2013.
6. L. Al Moakar, P. K. Chrysanthis, C. Chung, S. Guirguis, A. Labrinidis, P. Neophytou, K. Pruhs. "Auction-based Admission Control for Continuous Queries in a Multi-Tenant DSMS." *International Journal of Next-Generation Computing (IJNGC)*, 3(3):1-28, Nov. 2012.
7. P. Andreou, D. Zeinalipour-Yazti, P. K. Chrysanthis and G. Samaras. "In-Network Data Acquisition and Replication in Mobile Sensor Networks." *Distributed and Parallel Databases (DAPD)*, 29(1-2):87-112, Jan. 2011.
8. P. Andreou, D. Zeinalipour-Yazti, P. K. Chrysanthis and G. Samaras. "Power Efficiency through Tuple Ranking in Wireless Sensor Network Monitoring." *Distributed and Parallel Databases (DAPD)*, 29(1-2):113-150, Jan 2011.
9. P. Andreou, D. Zeinalipour-Yazti, A. Bamboris, P. K. Chrysanthis and G. Samaras. "Optimized Query Routing Trees for Wireless Sensor Networks." *Information Systems Journal (InfoSys)*, 3(2):267-291, June 2010.
10. S. Obermeier, S. Böttcher, M. Hett, P. K. Chrysanthis and G. Samaras. "Blocking reduction for distributed transaction processing within MANETs." *Distributed and Parallel Databases Journal (DAPD)*, 25(3):165-192, June 2009.
11. M. A. Sharaf, P. K. Chrysanthis, A. Labrinidis, and K. Pruhs. "Algorithms and Metrics for Processing Multiple Heterogeneous Continuous Queries." *ACM Transactions on Database Systems (TODS)*, 33(1):5.1-5.44, Mar. 2008.
12. A. Bonifati, P. K. Chrysanthis, A. M. Ouksel and K.U. Sattler. "Distributed Databases and Peer-to-Peer Databases: Past and Present." *Sigmod Record*, 37(1):5-11, Mar. 2008.
13. V. Zadorozhny, P. K. Chrysanthis, D. Sharma. "Sensor Queries: Algebraic Optimization for Time and Energy." *International Journal of Distributed Sensor Networks*, 4(3): 262-284, 2008.
14. J. Beaver, K. Pruhs, P. K. Chrysanthis and V. Liberatore. "Improving the Hybrid Data Dissemination Model of Web Documents." *WWW Journal*, 11 (3):313-337, 2008.
15. G. Santhanakrishnan, A. Amer and P. K. Chrysanthis. "Self-Tuning Caching: The Universal Caching Algorithm." *Software: Practice and Experience*, 36(11-12): 1179-1188, 2006.
16. S. Papastavrou, G. Samaras, P. Evripidou, P. K. Chrysanthis "A Decade of Dynamic Web Content: A Structured Survey on Past and Present Practices and Future Trend." *IEEE Communications Surveys and Tutorials*, 8(1-4): 52-60, 2006.
17. A. Al-Hammouri, W. Zhang, R. F. Buchheit, P. K. Chrysanthis, V. Liberatore, and K. Pruhs. "Network Awareness and Application Adaptability." *Journal on Information Systems and e-Business Management (ISeB)*, 4(4): 399-419, 2006.
18. V. Zadorozhny, D. Sharma, P. K. Chrysanthis, and A. Labrinidis. "Data Transmission Algebra for Collision-Aware Scheduling in Sensor Networks." *The Systems and Means of Informatics Journal, Special Issue on Formal Methods and Models for Compositional Infrastructures of Distributed Information Systems*, Russian Academy of Science, 15(3): 271-292, 2005

19. D. Fiedler, K. Walcott, T. Richardson, G.M. Kapfhammer, A. Amer, P. K. Chrysanthis. "Towards the Measurement of Tuple Space Performance." *ACM SIGMETRICS Performance Evaluation Review*, 33(3): 51-62, Dec. 2005.
20. M. A. Sharaf, and P. K. Chrysanthis. "On-Demand Data Broadcasting for Mobile Decision Making." *Journal of ACM Mobile Networking and Applications (MONET)*, 9(6):703-714, Dec. 2004.
21. M. A. Sharaf, Jon Beaver, A. Labrinidis, and P. K. Chrysanthis. "Balancing Energy Efficiency and Quality of Aggregate Data in Sensor Networks," *The International Journal on Very Large Data Bases (VLDBJ)*, 13(4): 384-403, Dec 2004.
22. S. Mazumdar and P. K. Chrysanthis. "Localization of Integrity Constraints in Mobile Databases and Specification in PRO-MOTION." *ACM/Baltzer Mobile Networks*, 9(5):481-490, Oct. 2004.
23. G. Samaras, K. Karenos, P. K. Chrysanthis, E. Pitoura. "Mobile Agent-Based Services for Database View Materialization." *ACM SIGMOBILE Mobile Computing and Communications Review (MC2R)*, 8(3):32-43, July 2004.
24. O. Shigiltchhoff, P. K. Chrysanthis and E. Pitoura. "Multiversion Data Dissemination: Broadcast Organizations and Caching." *Information Systems Journal (InfoSys)*, 29 (6): 509-528, March 2004.
25. E. Pitoura and P. K. Chrysanthis. "Multiversion Wireless Data Broadcasting." *IEEE Transactions on Computers (ToC)*, 51(10):1224-1230, Oct. 2002.
26. S. Papastavrou, P. K. Chrysanthis, G. Samaras, and E. Pitoura. "An Evaluation of the Java-based Approaches to Web Database Access." *International Journal of Cooperative information Systems*, 10(4):401-422, 2001.
27. Y. J. Al-Houmaily and P. K. Chrysanthis. "An Atomic Commit Protocol for Gigabit-Networked Distributed Database Systems." *Journal of Systems Architecture, The EuroMicro Journal*, 46(9): 809-833, June 2000.
28. S. Weissman Lauzac and P. K. Chrysanthis. "Utilizing Versions of Views within a Mobile Environment." *Journal of Computing and Information*, Special Issue on the ICCI-98: 9th International Conference on Computing and Information, 1999.
29. S. Banerjee and P. K. Chrysanthis. "Group Two-Phase Locking: A Scalable Data Sharing Protocol." *IEICE Transactions on Information Systems*, Vol. E82-D, No. 1, pp. 236-245, Jan. 1999.
30. G. D. Walborn and P. K. Chrysanthis. "PRO-MOTION: Support for Mobile Database Access." *Personal and Ubiquitous Computing*, Vol. 1, No. 3, pp. 171-181, Sept. 1997.
31. S. T. Frezza, S. P. Levitan and P. K. Chrysanthis. "Linking Requirements and Design Data for Automated Functional Evaluation." *Computers in Industry*, Vol. 30, pp. 13-25, Sept. 1996.
32. A. Massari, S. Weissman and P. K. Chrysanthis. "Supporting Mobile Database Access through Query by Icons." *Distributed and Parallel Databases (DAPD)*, Vol. 4, No. 3, pp. 249-270, July 1996.

33. K. Ramamritham and P. K. Chrysanthis. "A Taxonomy of Correctness Criteria in Database Applications." *The International Journal on Very Large Data Bases (VLDBJ)*, Vol. 4, No. 1, pp. 181–293, Jan. 1996.
34. P. K. Chrysanthis and K. Ramamritham. "Synthesis of Extended Transaction Models Using ACTA." *ACM Transactions on Database Systems (TODS)*, Vol. 19, No. 3, pp. 450–491, Sept. 1994.
35. P. K. Chrysanthis and K. Ramamritham. "Delegation in ACTA as a Means to Control Sharing in Extended Transactions." *IEEE Data Engineering Bulletin*, Special Issue on Workflow and Extended Transaction Systems, M. Hsu, special editor, 16(2): 16-19, June 1993.
36. P. K. Chrysanthis and K. Ramamritham. "A Unifying Framework for Transactions in Competitive and Cooperative Environments." *IEEE Office and Knowledge Engineering Bulletin*, Special Issue on Non-Standard Transaction Models, S. B. Zdonik, special editor, 4(1):3–22, Feb. 1991.
37. C. T. Liu, P. K. Chrysanthis and S.K. Chang. "Schema Evolution through Changes to ER Diagrams." *Journal of Information Science and Engineering (JISE)*, Vol. 9, No. 4, pp. 657–683, Dec. 1993.

REFEREED CONFERENCE & WORKSHOP PUBLICATIONS

1. D. Kline, N. Parshook, X. Ge, E. Brunvand, R. Melhem, P. K. Chrysanthis and A. Jones. "Holistically Evaluating the Environmental Impacts in Modern Computing Systems." *Proc. of the 7th Int'l Green and Sustainable Computing Conference (IGSC'16)*, Nov. 2016.
2. X. Ge, P. K. Chrysanthis, K. Pelechrinis. "MPG: Not so Random Exploration of a City," *Proc. of the 17th IEEE Int'l Conference on Mobile Data Management (MDM'16)*, June 2016.
3. A. Zheng, A. Labrinidis, and P. K. Chrysanthis. "Planar: Parallel Lightweight Architecture-Aware Adaptive Graph Repartitioning." *Proc. of the 32nd IEEE Int'l Conference on Data Engineering (ICDE'16)*, May 2016.
4. H. Ehsan, M. A. Sharaf and P. K. Chrysanthis. "MuVE: Efficient Multi-Objective View Recommendation for Visual Data Exploration." *Proc. of the 32nd IEEE Int'l Conference on Data Engineering (ICDE'16)*, May 2016.
5. A. Zheng, A. Labrinidis, P. H. Pisciuneri, P. K. Chrysanthis and P. Givi. "PARAGON: Parallel Architecture-Aware Graph Partition Refinement Algorithm." *Proc. of the 19th Int'l Conference on Extending Database Technology (EDBT'16)*, pp. 1-12, Mar 2016.
6. A. U. Shein, P. K. Chrysanthis and A. Labrinidis. "F1: Accelerating the optimization of Aggregate Continuous Queries." *Proc. of the 24th ACM Int'l Conference on Information and Knowledge Management (CIKM'15)*, pp. 1151-1160, Oct. 2015.
7. C. Mafra, J. Johnson, S. Bock, T. N. Pham, B. R. Childers, P. K. Chrysanthis and A. Labrinidis. "Stream query processing on emerging memory architectures." *Proc. of the 4th IEEE Non-Volatile Memory Systems and Applications Symposium (NVMSA'15)*, pp. 1-6, Aug. 2015.
8. A. U. Shein, P. K. Chrysanthis and A. Labrinidis. "Processing of Aggregate Continuous Queries in a Distributed Environment." *Proc. of the 9th Int'l Workshop on Business Intelligence for the Real Time Enterprise (BIRTE'15)*, pp. 1-16, Aug. 2015 (Co-located with VLDB 2015).

9. A. Konstantinidis, G. Nikolaidis, G. Chatzimilioudis, G. Evagorou, D. Zeinalipour-Yazti and P. K. Chrysanthis. "Radiomap Prefetching for Indoor Navigation in Intermittently Connected WiFi Networks." *Proc. of the 16th Intl IEEE Int'l Conference on Mobile Data Management (MDM'15)*, pp. 34–43, Jun. 2015.
10. X. Ge, P. K. Chrysanthis and A. Labrinidis. "Preferential Diversity." *Proc of the 2nd Intl Workshop on Exploratory Search in Databases and the Web (ExploreDB)*, pp. 9–14, Jun. 2015. (Co-located with ACM SIGMOD 2015).
11. R. Gheorghiu, A. Labrinidis, and P. K. Chrysanthis. "Unifying Qualitative and Quantitative Database Preferences to Enhance Query Personalization." *Proc of the 2nd Intl Workshop on Exploratory Search in Databases and the Web (ExploreDB)*, pp. 6–8, Jun. 2015. (Co-located with 2015).
12. A. Zheng, A Labrinidis, and P. K. Chrysanthis. "Architecture-Aware Graph Repartitioning for Data-Intensive Scientific Computing." *Proc. of the 1st Int'l Workshop on High Performance Big Graph Data Management, Analysis, and Mining (BigGraphDM'14)*, pp. 78–85, Oct. 2014.
13. N. Farnan, A. J. Lee, P. K. Chrysanthis, and T. Yu. "PAQO: Preference-Aware Query Optimization for Decentralized Database Systems," *Proc. of the 30th IEEE Int'l Conference on Data Engineering (ICDE'14)*, pp. 424–435, Apr. 2014.
14. J. Lange, A Labrinidis and P. K. Chrysanthis. "Towards Automated Personalized Data Storage" *Proc. of the 8th Int'l Workshop on Self-Managing Database Systems (SMDB'14)*, ICDE Workshops, pp. 278–283, Apr. 2014.
15. G. Gadola and P. K. Chrysanthis. "Harnessing Off-Grid Renewable Energy," *Proc. of the 2nd Int'l Conference on Renewable Energy Research and Applications (ICRERA'13)*, pp. 927 - 931, Oct. 2013.
16. P. Neophytou, P. K. Chrysanthis, and A. Labrinidis. "A Continuous Workflow Scheduling Framework," *Proc. of the 2nd ACM Int'l Workshop on Scalable Workflow Enactment Engines and Technologies (SWEET'13)*, June 2013.
17. T. N. Pham, P. K. Chrysanthis, A. Labrinidis. "Self-managing load shedding for data stream management systems," *Proc. of the 7th Int'l Workshop on Self-Managing Database Systems (SMDB'13)*, ICDE Workshops, pp. 70–76, Apr. 2013.
18. S. Papastavrou, P. K. Chrysanthis and G. Samaras. "Exploring Content Dependencies to Better Balance Performance and Freshness in Web Databases." *Proc. of the 13th Int'l Conference on Web Information System Engineering (WISE'12)*, pp. 512–525. Nov. 2012.
19. R. Rexit, F. Tsui, J. Espino, S. Wesaratchakit, Y. Ye and P. K. Chrysanthis. "Using a Distributed Search Engine to Identify Optimal Product Sets for Use in an Outbreak Detection System." *Proc. of the first Int'l Workshop on Collaborative Big Data (C-Big)*, pp. 1-8, Oct. 2012.
20. R. Gheorghiu, A. Labrinidis, P.K. Chrysanthis. "Database Preferences - A Unified Model." *Proc. of 6th Int'l Workshop on Personalized Access, Profile Management, and Context Awareness in Databases (PersDB)*, VLDB Workshops, pp. 1-6, Aug. 2012.
21. S. Guirguis, M. A. Sharaf, P. K. Chrysanthis, and A. Labrinidis, "Three-level Processing of Multiple Aggregate Continuous Queries." *Proc. of the 28th IEEE Int'l Conference on Data Engineering (ICDE)*, pp. 929-940, Apr. 2012.

22. L. Al Moakar, A. Labrinidis, P. K. Chrysanthis, "Adaptive Class-based Scheduling of Continuous Queries." *Proc. of the 7th Int'l Workshop on Self-Managing Database Systems (SMDB)*, ICDE Workshops, pp. 289-294, Apr. 2012.
23. S. Guirguis, M. A. Sharaf, P. K. Chrysanthis, and A. Labrinidis, "Optimized Processing of Multiple Aggregate Continuous Queries." *Proc. of the ACM Int'l Conference on Information and Knowledge Management (CIKM)*, pp. 1-10, Oct. 2011.
24. N. Farnan, A. J. Lee, P. K. Chrysanthis, and T. Yu, "Don't Reveal My Intension: Protecting User Privacy using Declarative Preferences during Distributed Query Processing." *Proc. of the 16th European Symposium on Research in Computer Security (ESORCS)*, pp. 628-647, Sept. 2011.
25. S. M. Snyder, Shimin Chen, P. K. Chrysanthis, A. Labrinidis. "QMD: Exploiting Flash for Energy Efficient Disk Arrays." *Proc. of the 7th Int'l Workshop on Data Management on New Hardware (DaMoN'11)*, SIGMOD Workshops, pp. 41-49, June 2011.
26. P. Neophytou, J. Szwedko, M. A. Sharaf, P. K. Chrysanthis, A. Labrinidis, "Optimizing the Energy Consumption of Continuous Query Processing with Mobile Clients." *Proc. of the 12th Int'l IEEE Conference on Mobile Data Management (MDM'11)*, (1):98-103, June 2011.
27. M. K. Iskander, D. W. Wilkinson, A. J. Lee, P. K. Chrysanthis, "Enforcing Policy and Data Consistency of Cloud Transactions." *Proc. of the 2nd IEEE Int'l Workshop on Security and Privacy on the Cloud (SPCC)*, ICDCS Workshops, pp. 253-262, June 2011.
28. T. N. Pham, L. Al Moakar, P. K. Chrysanthis, A. Labrinidis, DILoS: A Dynamic Integrated Load Manager and Scheduler for Continuous Queries." In *The 6th Int'l Workshop on Self-Managing Database Systems (SMDB)*, ICDE Workshops, pp. 10-15, April 2011.
29. Alexander G. Connor, P. K. Chrysanthis, A. Labrinidis, "Key-Key-Value Stores for Efficiently Processing Graph Data in the Cloud." *Proc. of the 2nd Int'l Workshop on Graph Data Management (GDM'11)*, pp. 88-93, April 2011.
30. P. Neophytou, P. K. Chrysanthis, A. Labrinidis and M. A. Sharaf. "Power Aware Operator Placement and Broadcasting of Continuous Query Results." *Proc. of the 9th Int'l ACM Workshop on Data Engineering for Wireless and Mobile Access (MobiDE'10)*, June 2010.
31. L. Al Moakar, P. K. Chrysanthis, C. Chung, S. Guirguis, A. Labrinidis, P. Neophytou, K. Pruhs. "Admission Control Mechanisms for Continuous Queries in the Cloud." *Proc. of the 26th Int'l Conference on Data Engineering (ICDE'10)*, Mar. 2010.
32. M. A. Sharaf, P. K. Chrysanthis, A. Labrinidis. "Tuning QoD in Stream Processing Engines." *Proc. of the 21st Australasian Database Conference (ADC'10)*, Jan. 2010.
33. P. Andreou, O. Spanos, D. Zeinalipour-Yazti, G. Samaras, and P. K. Chrysanthis. "FSort: External Sorting on Flash-based Sensor Devices." *Proc. of the 6th Int'l Workshop on Data Management for Sensor Networks (DMSN'09)*, Aug. 2009.
34. L. Al Moakar, T. N. Pham, P. Neophytou, P. K. Chrysanthis, A. Labrinidis, and M. A. Sharaf. "Class-based Continuous Query Scheduling for Data Streams." *Proc. of the 6th Int'l Workshop on Data Management for Sensor Networks (DMSN'09)*, Aug. 2009.

35. M. A. Sharaf, P. K. Chrysanthis, A. Labrinidis and C. Amza. "Optimizing I/O-Intensive Transactions in Highly Interactive Applications." *Proc. of the ACM Sigmod Int'l Conference on Management of Data (Sigmod'09)*, pp. 785-798, June 2009.
36. P. Andreou, D. Zeinalipour-Yazti, M. Andreou, P. K. Chrysanthis and G. Samaras. "Perimeter-Based Data Replication and Aggregation in Mobile Sensor Networks." *Proc. of the 10th Int'l Conference on Mobile Data Management (MDM'09)*, May 2009.
37. P. Andreou, A. Pamboris, D. Zeinalipour-Yazti, P.K. Chrysanthis, G. Samaras. "ETC: Energy-driven Tree Construction in Wireless Sensor Networks." *Proc. of the 2nd Int'l Workshop on Sensor Network Technologies for Information Explosion Era*, May 2009
38. S. Guirguis, M. A. Sharaf, P. K. Chrysanthis, A. Labrinidis and K. Pruhs. "Adaptive Scheduling of Web Transactions." *Proc. of the 25th Int'l Conference on Data Engineering (ICDE'09)*, pp.357-368, April 2009.
39. Q. Li, A. Lambrinidis and P. K. Chrysanthis. "ViP: A User-Centric View-Based Annotation Framework for Scientific Data." *Proc. of the 20th Int'l Conference on Scientific and Statistical Database Management (SSDBM'08)*, July 2008.
40. V. Verroios, K. Kollias, P. K. Chrysanthis and A. Delis. " Adaptive Navigation of Vehicles in Congested Road Networks." *Proc. of the IEEE Int'l Conference on Pervasive Services (ICPS'08)*, July 2008.
41. Q. Li, A. Lambrinidis and P. K. Chrysanthis. "User-centric Annotation Management for Biological Data," *Proc. of the 2nd Int'l Provenance and Annotation Workshop (IPAW)*, pp. 54-61, June 2008.
42. P. Andreou, D. Zeinalipour-Yazti, P. K. Chrysanthis, and G. Samaras. "Workload-aware Query Routing Trees in Wireless Sensor Networks." *Proc. of the 9th Int'l Conference on Mobile Data Management (MDM'08)*, pp. 189-196, April 2008.
43. W. Zhang, V. Liberatore, J. Beaver, P. K. Chrysanthis and K. Pruhs. "Scalable Data Dissemination Using Hybrid Methods." *Proc. of the 22nd IEEE Int'l Parallel and Distributed Processing Symposium (IPDPS)*, pp. 1-12, April 2008.
44. S. Obermeier, S. Böttcher, M. Hett, P. K. Chrysanthis and G. Samaras. "Adjourn State Concurrency Control Avoiding Time-Out Problems in Atomic Commit Protocols." *Proc. of the 24th Int'l Conference on Data Engineering (ICDE'08)*, pp. 1477-1479, April 2008.
45. M. A. Sharaf, S. Guirguis, A. Labrinidis, K. Pruhs, and P. K. Chrysanthis. "ASETS: A Self-Managing Transaction Scheduler" *Proc. of 3rd Int'l Workshop on Self-Managing Database Systems (SMDB'08, held in conjunction with the ICDE'08)*, pp. 56-62, April 2008.
46. D. Zeinalipour-Yazti, P. Andreou, P. K. Chrysanthis and G. Samaras. "SenseSwarm: A Perimeter-based Data Acquisition Framework for Mobile Sensor Networks." *Proc. of 4th Int'l Workshop on Data Management for Sensor Networks (DMSN'07)*, pp. 13-18, Sept. 2007.
47. A. Berfield, P. K. Chrysanthis, and D. Mossé. "LSynD: Localized Synopsis Diffusion." *Proc. of 10th IEEE Int'l Symposium on Object and Component-Oriented Real-Time Computing*, May 2007.

48. D. Zeinalipour-Yazti, P. Andreou, P. K. Chrysanthis and G. Samaras. "MINT Views: Materialized In-Network Top-k Views in Sensor Networks." *Proc. of the 8th Int'l Conference on Mobile Data Management (MDM'07)*, pp. 182-189, May 2007.
49. D. Zeinalipour-Yazti, P. Andreou, P. K. Chrysanthis, G. Samaras, and A. Pitsillides. "The MicroPulse Framework for Adaptive Waking Windows in Sensor Networks." *Proc. of the Int'l Workshop on Data Intensive Sensor Networks 2007 (DISN'07)*, May 2007.
50. M. Aly, K. Pruhs, P. K. Chrysanthis "KDDCS: a load-balanced in-network data-centric storage scheme for sensor networks," *Proc. of Conference on Information and Knowledge Management (CIKM)*, pp. 317-326, Nov. 2006.
51. M. Sharaf, P. K. Chrysanthis, A. Labrinidis and K. Pruhs. "Efficient Scheduling of Heterogeneous Continuous Queries." *Proc. of VLDB*, pp. 511-522, Sept 2006.
52. A. Berfield, P. K. Chrysanthis, and A. Labrinidis. "Energy-Efficient Handling of Sensor Failures," *Proc. of 3rd Int'l Workshop on Data Management for Sensor Networks*, Sept. 2006.
53. M. Aly, P. K. Chrysanthis and K. Pruhs. "Decomposing Data-Centric Storage Query Hot-Spots in Sensor Networks." *Proc. of Mobiquitous*, July 2006.
54. P. Neophytou, A. Labrinidis and P. K. Chrysanthis. "WhiteBoard P2P: A Peer-to-Peer Reliable Data Dissemination Infrastructure for Collaborative Applications." *Proc. of the Int'l Conference on Intelligent Systems and Computing: Theory and Applications*, pp. 177-186, July 2006.
55. J. Beaver, P. K. Chrysanthis and K. Pruhs. "To Broadcast Push or Not and What?," *Proc of the 7th Int'l Conference on Mobile Data Management*, pp. 40-48, May 2006.
56. D. Sharma, V. I. Zadorozhny and P. K. Chrysanthis. "Structural Health Monitoring with Whirlpool." *Proc. of the 5th Int'l Workshop on Structural Health Monitoring*, pp. 991-998, Sept. 2005.
57. S. Papastavrou, G. Samaras, P. Evripidou, and P. K. Chrysanthis. "CFP Taxonomy of the Approaches for Dynamic Web Content Acceleration." *Proc. of the 9th East-European Conference on Advances in Databases and Information Systems*, pp. 365-378, Sept. 2005.
58. M. Aly, N. Morsillo, P. K. Chrysanthis, and K. Pruhs. "Zone Sharing: A HotSpots Decomposition Scheme for DataCentric Storage in Sensor Networks." *Proc. of the Second Int'l Workshop on Data Management for Sensor Networks (DMSN'05)*, (held in conjunction with 31st VLDB conference), pp. 21-26, August 2005.
59. D. Sharma, V. I. Zadorozhny, and P. K. Chrysanthis. "Timely Data Delivery in Sensor Networks using Whirlpool." *Proc. of the Second Int'l Workshop on Data Management for Sensor Networks (DMSN'05)*, (held in conjunction with 31st VLDB Conference), pp. 53-60, August 2005.
60. N. Harkiolakis, P. K. Chrysanthis and G. Tsarouhas. "Virtual Reality Worlds for Real Time E-Learning Environments." *Proc. of 11th Int'l Conference on Human-Computer Interaction*, July 2005.
61. A. Gopalan, T. Znati, and P. K. Chrysanthis. "Structuring Pervasive Services in Infrastructureless Networks." *Proc. of the IEEE Int'l Conference on Pervasive Services*, July 2005.

62. G. Santhanakrishnan, Q. Li, J. Beaver, P. K. Chrysanthis, A. Amer, and A. Labrinidis. "Multi-criteria Routing in pervasive environment with sensors." *Proc. of the IEEE Int'l Conference on Pervasive Services*, July 2005.
63. M. A. Sharaf, A. Labrinidis, P. K. Chrysanthis, K. Pruhs. "Freshness-Aware Scheduling of Continuous Queries in the Dynamic Web." *Proc. of the 8th Int'l Workshop on the Web and Databases (WebDB'05)*, pp. 73-78, June 2005.
64. G. Santhanakrishnan, A. Amer, and P. K. Chrysanthis. "Towards Universal Mobile Caching." *Proc. of the 4th ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access*, (held in conjunction with the ACM SIGMOD 2005 Conference), June 2005.
65. J. Larkby-Lahet, G. Santhanakrishnan, A. Amer and P. K. Chrysanthis. "STEP: Self-Tuning Energy-safe Predictors". *Proc of the 6th Int'l Conference on Mobile Data Management (MDM'05)*, May 2005.
66. A. Munteanu, J. Beaver, A. Labrinidis, and P. K. Chrysanthis. "Multiple Query Routing Trees in Sensor Networks." *Proc of the IASTED Int'l Conference on Databases and Applications*, Feb. 2005.
67. M. A. Sharaf, P. K. Chrysanthis, and A. Labrinidis. "Preemptive Rate-based Operator Scheduling in a Data Stream Management System." *Proc. of the Third ACS/IEEE Int'l Conference on Computer Systems and Applications*, Jan. 2005.
68. V. Kumar, N. Prabhu, and P. K. Chrysanthis. "HDC - Hot Data Caching in Mobile Database Management System." *Proc. of the Third ACS/IEEE Int'l Conference on Computer Systems and Applications (AICCSA)*, Jan. 2005.
69. Y. J. Al-Houmaily, and P. K. Chrysanthis. "ML-1-2PC: An Adaptive Multi-level Atomic Commit Protocol." *Proc. of the 8th East-European Conference on Advances in Databases and Information Systems*, pp. 275-290, Sept. 2004.
70. V. I. Zadorozhny, P. K. Chrysanthis and A. Labrinidis. "Algebraic Optimization of Data Delivery Patterns in Mobile Sensor Networks." *Proc. of the 7th DEXA Int'l Workshop on Mobility in Databases and Distributed Systems*, pp.668-672, Aug. 2004.
71. V. I. Zadorozhny, P. K. Chrysanthis and P. Krishnamurthi. "A Framework for Extending the Synergy between Query Optimization and MAC Layer in Sensor Networks." *Proc. of the 1st Workshop on Data Management for Sensor Networks (DMSN)*, held in conjunction with VLDB 2004 Conference, Aug. 2004.
72. J. Beaver, N. W. Morsillo, K. Pruhs, P. K. Chrysanthis and V. Liberatore. "Scalable Dissemination: What's Hot and What's Not." *Proc. of the 7th Int'l Workshop on the Web and Databases (WebDB 2004)*, held in conjunction with the ACM SIGMOD 2004 Conference, June 2004.
73. A. Berfield, P. K. Chrysanthis and A. Labrinidis. "Automated Service Integration for Crisis Management." *Proc. of DIVO*, June 2004.
74. S. Papastavrou, G. Samaras, P. Evripidou, P. K. Chrysanthis. "Fine-Grained Parallelism in Dynamic Web Content Generation: The Parse & Dispatch Approach." *Proc. of IFCIS Cooperative Information Systems*, Nov. 2003.

75. G. Samaras, K. Karenos, P. K. Chrysanthis, E. Pitoura. "ViSMA: Extendible, Mobile-Agent Based Services for the Materialization and Maintenance of Personalized and Shareable Web Views." *Proc. of the 11th DEXA Int'l Workshop on Mobility in Databases and Distributed Systems*, pp. 974-979, Sept. 2003.
76. Y. J. Al-Houmaily and P. K. Chrysanthis. "1-2PC: the one-two phase atomic commit protocol." *19th ACM SAC 2004*, pp 684-691, Mar. 2004.
77. G. Santhanakrishnan, A. Amer, P. K. Chrysanthis and D. Li. "GD-GhOST: a goal-oriented self-tuning caching algorithm." *19th ACM SAC 2004*, pp. 1141-1145, Mar. 2004.
78. S. Papastavrou, G. Samaras, P. Evripidou, P. K. Chrysanthis. "Fine-Grained Parallelism in Dynamic Web Content Generation: The Parse & Dispatch Approach." *Proc. of IFCIS Cooperative Information Systems*, pp. 573-588, Nov. 2003.
79. J. Beaver, M. A. Sharaf, A. Labrinidis, and P. K. Chrysanthis. "Location-Aware Routing for Data Aggregation for Sensor Networks." In the Geo Sensor Networks Workshop, Oct. 2003.
80. G. Samaras, K. Karenos, P. K. Chrysanthis and E. Pitoura. "ViSMA: Extendible, Mobile-Agent Based Services for the Materialization and Maintenance of Personalized and Shareable Web Views." *Proc. of the 6th DEXA Int'l Workshop on Mobility in Databases and Distributed Systems*, pp. 974-979, Sept. 2003.
81. M. A. Sharaf, J. Beaver, A. Labrinidis, and P. K. Chrysanthis. "TiNA: A Scheme for Temporal Coherency-Aware in-Network Aggregation." *Proc. of the 3rd ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access*, pp. 69-76, Sept. 2003.
82. M. A. Sharaf, Y. Sismanis, A. Labrinidis, P. K. Chrysanthis, N. Roussopoulos. "Efficient Dissemination of Aggregate Data over the Wireless Web." *Proc. of the 6th Int'l Workshop on the Web and Databases (WebDB 2003)*, held in conjunction with the ACM SIGMOD 2003 Conference, June 2003.
83. O. Shigiltchhoff, P. K. Chrysanthis and E. Pitoura. "Broadcast Data Organizations and Client Side Cache." *Proc. of IEEE Int'l Workshop on Mobile Distributed Computing*, pp. 420-426, May 2003.
84. G. Samaras, G. Kyrou and P. K. Chrysanthis. "Two-Phase Commit Processing with Restructured Commit Tree." *Post Proc. of the 8th Panhellenic Conference on Informatics and Computer Science*, LNCS series, Vol.2563, pp. 82-99, May 2003. (Expanded version of the conference paper), 2003.
85. E. Pitoura, P. K. Chrysanthis and K. Ramamritham. "Characterizing the Temporal and Semantic Coherency of Broadcast-based Data Dissemination." *Proc. of the Int'l Conference on Database Theory*, pp. 410-424, Jan. 2003.
86. P. K. Chrysanthis, K. Pruhs, and V. Liberatore. "Middleware Support for Multicast-based Data Dissemination: A Working Reality." *Proc. of the 8th IEEE Int'l Workshop on Object-oriented Real-time Dependable Systems*, Jan. 2003.
87. M. A. Sharaf and P. K. Chrysanthis. "Semantic-Based Delivery of OLAP Summary Tables in Wireless Environments." *Proc. of the 10th ACM Int'l Conference on Information and Knowledge Management*, pp. 84-92, VA, Nov. 2002

88. S. Weissman Lauzac and P. K. Chrysanthis. "View Propagation and Inconsistency Detection for Cooperative Mobile Agents." *Proc. of IFCIS Cooperative Information Systems*, pp. 107-124, Irvine, CA, Nov. 2002.
89. M. A. Sharaf and P. K. Chrysanthis. "Facilitating Mobile Decision Making." *Proc. of the 2nd ACM Mobicom Int'l Workshop on Mobile Commerce*, pp. 45-53, Atlanta, GA, Sept. 2002.
90. O. Shigiltchhoff, P. K. Chrysanthis and E. Pitoura. "Multiversion Data Broadcast Organizations." *Proc. of the 6th East-European Conference on Advances in Databases and Information Systems*, pp. 135-148, Bratislava, Slovakia, Sept. 2002.
91. P. K. Chrysanthis and V. Zadoronzhny. "From Location Databases to Pervasive Catalog." *Proc. of the 10th DEXA Int'l Workshop on Mobility in Databases and Distributed Systems*, pp. 739-744, Aix-en-Provence, France, Sept. 2002.
92. P. Prasithsangaree, P. Krishnamurthy, and P. K. Chrysanthis. "On Indoor Position Location with Wireless LANs." *Proc. of the 13th IEEE Int'l Symposium on Personal, Indoor, and Mobile Radio Communications*, Lisbon, Portugal, Sept. 2002.
93. S. Weissman Lauzac and P. K. Chrysanthis. "Personalizing Information Gathering for Mobile Database Clients." *Proc. of the 17th ACM Annual Symposium on Applied Computing*, pp. 49-56, Madrid, Spain, Mar. 2002.
94. A. Berfield, Y. Tsamardinos, P. K. Chrysanthis, M. Pollack and S. Banerjee. "A Scheme for Integrating E-Services in Establishing Virtual Enterprises." *Proc. of 12th IEEE Int'l Workshop on Research Issues in Data Engineering*, pp. 134-142, San Jose, CA, Feb. 2002.
95. S. Mazumdar, M. Pietrzyk and P. K. Chrysanthis. "Caching Constrained Mobile Data." *Proc. of the 10th ACM Int'l Conference on Information and Knowledge Management*, pp.442-449, Atlanta, GA, Nov. 2001.
96. A. Berfield, Bill Simons, P. K. Chrysanthis and K. Pruhs. "Better Client OFF Time Prediction Using Machine Learning Techniques." *Proc. of the ACM Workshop on Web Information and Data Management*, pp. 39-46, Atlanta, GA, Nov. 2001.
97. G. Samaras, G. Kyrou and P. K. Chrysanthis. "Structuring the Commit Tree for Better Performance of Two Phase Commit Processing." *Proc. of the 8th Panhellenic Conference on Informatics and Computer Science*, Volume 1, pp. 382-391, Cyprus, Nov. 2001.
98. S. Banerjee, P. K. Chrysanthis and A. Deshpande. "Scalable Performance through Cooperative Data Shipping." *Proc. of the 14th Int'l Conference on Parallel and Distributed Computing Systems*, Dallas, TX, Aug. 2001.
99. R. Agrawal and P. K. Chrysanthis. "Efficient Data Dissemination to Mobile Clients in E-Commerce Applications." *Proc. of the 3rd Int'l Workshop on Electronic Commerce and Web Information Systems*, pp. 58-65, San Jose, CA, June 2001.
100. S. Papastavrou, P. K. Chrysanthis, G. Samaras, and E. Pitoura. "An Evaluation of the Java-based Approaches to Web Database Access." *Proc. of IFCIS/VLDB Cooperative Information Systems*, pp. 102-113, Israel, Sept. 2000.

101. S. Papastavrou, P. K. Chrysanthis, G. Samaras, E. Pitoura. "A Survey of the Java based Approaches for Web Database Access." *Proc. of the 10th IEEE Mediterranean Electrotechnical Conference*, Cyprus, May 2000.
102. E. Pitoura and P. K. Chrysanthis. "Exploiting Versions for Handling Updates in Broadcast Disks." *Proc. of the 25th Int'l Conference on Very Large Data Bases*, pp. 114-125, Edinburgh, Scotland, Sept. 1999.
103. S. Mazumdar and P. K. Chrysanthis. "Achieving Consistency in Mobile Databases through Localization in PRO-MOTION." *Proc. of the 10th DEXA Int'l Workshop on Mobility in Databases and Distributed Systems*, pp. 82-89, Florence, Italy, Sept. 1999.
104. E. Pitoura and P. K. Chrysanthis. "Scalable Processing of Read-Only Transactions in Broadcast Push." *Proc. of the 19th IEEE Int'l Conference on Distributed Computing Systems*, pp. 432-439, Austin, TX, June 1999.
105. Y. J. Al-Houmaily and P. K. Chrysanthis. "Atomicity with Incompatible Presumptions." *Proc. of the 8th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems*, pp. 306-315, Philadelphia, PA, June 1999.
106. P. K. Chrysanthis, T. F. Znati, S. Banerjee and S. K. Chang, "Establishing Virtual Enterprises by means of Mobile Agents." *Proc. of the 9th IEEE Int'l Workshop on Research Issues in Data Engineering*, pp. 116-125, Sydney, Australia, March 1999.
107. G. D. Walborn and P. K. Chrysanthis. "Transaction Processing in PRO-MOTION" *Proc. of the 14th ACM Annual Symposium on Applied Computing*, pp. 389-398, San Antonio, TX, Feb. 1999.
108. Y. J. Al-Houmaily, R. Conticello, J. Pike and P. K. Chrysanthis. "Performance of Five Atomic Commit Protocols in Gigabit-Networked Database Systems." *Proc. of 11th Int'l Conference on Parallel and Distributed Computing Systems*, pp. 29-36, Chicago, Sept. 1998.
109. S. Weissman Lauzac and P. K. Chrysanthis. "Programming Views for Mobile Database Clients." *Proc. of the 9th DEXA Int'l Workshop on Mobility in Databases and Distributed Systems*, pp. 408-413, Vienna, Austria, Aug. 1998.
110. S. Weissman Lauzac and P. K. Chrysanthis. "Utilizing Versions of Views within a Mobile Environment." *Proc. of the 9th Int'l Conference on Computing and Information*, pp. 201-208, Canada, June 1998.
111. S. Banerjee and P. K. Chrysanthis. "Network Latency Optimizations in Distributed Database Systems." *Proc. of the 13th Int'l Conference on Data Engineering (ICDE)*, pp. 532-540, Feb. 1998.
112. S. Banerjee and P. K. Chrysanthis. "Performance Evaluation of the g-2PL Protocol." *Proc. of the 10th Int'l Conference on Parallel and Distributed Computing Systems*, pp. 717-724, New Orleans, Sept. 1997.
113. Al-Houmaily, Y., P. Chrysanthis and S. Levitan. "An Argument in Favor of the Presumed Commit Protocol." *Proc. of the 13th Int'l Conference on Data Engineering*, pp. 255-265, Birmingham, U.K., Apr. 1997.

114. G. D. Walborn and P. K. Chrysanthis. "PRO-MOTION: Management of Mobile Transactions." *Proc. of the 12th ACM Annual Symposium on Applied Computing*, pp. 101–108, San Jose, CA, Feb. 1997.
115. Al-Houmaily, Y., P. Chrysanthis and S. Levitan. "Enhancing the Performance of Presumed Commit Protocol." *Proc. of the 12th ACM Annual Symposium on Applied Computing*, pp. 131–133, San Jose, CA, Feb. 1997.
116. S. Banerjee and P. K. Chrysanthis. "A Fast and Robust Failure Recovery Scheme for Shared-Nothing Gigabit-Networked Databases." *Proc. of the 9th Int'l Conference on Parallel and Distributed Computing Systems*, pp. 684–689, France, Sept. 1996.
117. Y. J. Al-Houmaily and P. K. Chrysanthis. "The Implicit-Yes Vote Commit Protocol with Delegation of Commitment." *Proc. of the 9th Int'l Conference on Parallel and Distributed Computing Systems*, pp. 804–810, France, Sept. 1996.
118. S. Banerjee and P. K. Chrysanthis. "A New Token Passing Distributed Mutual Exclusion Algorithm." *Proc. of the 16th IEEE Int'l Conference on Distributed Computing Systems*, pp. 717–724, Hong-Kong, May 1996.
119. Y. J. Al-Houmaily and P. K. Chrysanthis. "Dealing with Incompatible Presumptions of Commit Protocols in Multidatabase Systems." *Proc. of the 11th ACM Annual Symposium on Applied Computing*, pp. 186–195, Philadelphia, PA, Feb. 1996.
120. D. Chen, R. Colwell, H. Gelman, P. K. Chrysanthis and D. Mossé. "A Framework for Experimenting with QoS for Multimedia Services." *Proc. of the Multimedia Computing and Networking 1996 Conference*, pp. 186–197, San Jose, CA, Jan. 1996.
121. Y. J. Al-Houmaily and P. K. Chrysanthis. "A Two Phase Commit Optimization for Gigabit-Networked Databases." *Proc. of the 8th Int'l Conference on Parallel and Distributed Computing Systems*, pp. 554–560, Orlando, FL, Sept. 1995.
122. G. Walborn and P. K. Chrysanthis. "Supporting Semantics-Based Transaction Processing in Mobile Database Applications." *Proc. of the 14th IEEE Symposium on Reliable Distributed Systems*, pp. 31–40, Germany, Sept. 1995.
123. S. Banerjee and P. K. Chrysanthis. "Data Sharing and Recovery in Gigabit-Networked Databases." *Proc. of the 4th Int'l Conference on Computer Communications and Networks*, pp. 204–211, Las Vegas, Sept. 1995.
124. P. K. Chrysanthis and D. Mossé. "Management and Delivery of Multimedia Traffic." *Proc. of the 2nd IEEE Int'l Workshop on Community Networking*, pp. 189–196, Princeton, NJ, June 1995.
125. S. T. Frezza, S. P. Levitan, P. K. Chrysanthis. "Requirements-Based Design Evaluation." *Proc. of the 32nd IEEE/ACM Design Automation Conference*, pp. 76–81, CA, June 1995.
126. A. Massari and P. K. Chrysanthis. "Visual Query of Completely Encapsulated Objects." *Proc. of the 5th IEEE Int'l Workshop on Research Issues on Data Engineering: Distributed Object Management*, pp. 18–25, Taiwan, Mar. 1995.

127. C. T. Liu, P. K. Chrysanthis, and S.K. Chang. "Database Schema Evolution through the Specification and Maintenance of Changes on Entities and Relationships." *Proc. of the 13th Int'l Conference on the Entity-Relationship Approach*, pp. 132–151, U.K., Dec. 1994.
128. P. K. Chrysanthis and K. Ramamritham. "Autonomy Requirements in Heterogeneous Distributed Database Systems." *Proc. of the 6th Int'l Conference on Management of Data*, pp. 283–302, India, Dec. 1994.
129. C. T. Liu, S.K. Chang and P. K. Chrysanthis. "Database Schema Evolution using EVER Diagrams." *Proc. of the Int'l Workshop on Advanced Visual Interfaces*, pp. 123–132, Italy, June 1994.
130. P. K. Chrysanthis and K. Ramamritham. "Systematic Synthesis of Extended Transactions." *Proc. of the 4th Hellenic Conference on Informatics*, Vol. 2, pp. 259–272, Dec. 1993.
131. P. K. Chrysanthis and K. Ramamritham. "Impact of Autonomy Requirements on Transactions and their Management in Heterogeneous Distributed Database Systems." *Proc. of the DBTA Workshop on Interoperability of Database Systems and Database Applications*, pp. 179–197, Switzerland, Oct., 1993.
132. P. K. Chrysanthis. "Transaction Processing in a Mobile Computing Environment." *Proc. of the IEEE Workshop on Advances in Parallel and Distributed Systems*, pp. 77–82, Princeton, NJ, Oct. 1993.
133. A. Massari, G. Costagliola, P. K. Chrysanthis and S.K. Chang. "Programs as Databases: Treating Code and Comments as First Class Objects." *Proc. of the 5th Int'l Conference on Software Engineering and Knowledge Engineering*, pp. 78–85, Redwood, CA, June 1993.
134. C. T. Liu, S. K. Chang and P. K. Chrysanthis. "An Entity-Relationship Approach to Schema Evolution." *Proc. of the 5th Int'l Conference on Computing and Information*, pp. 575–578, Canada, May 1993.
135. K. DiBella, K. Ramamritham, P. K. Chrysanthis and S. Raghuram. "Scheduling Algorithms and their Performance on Shared Memory Multiprocessors." *Proc. of the 5th Int'l Conference on Parallel and Distributed Computing and Systems*, pp. 133–139, Pittsburgh, Oct. 1992.
136. K. Ramamritham and P. K. Chrysanthis. "In Search for the Acceptability Criteria: Database Consistency Requirements and Transaction Correctness Properties." *Proc. of the Int'l Workshop on Distributed Object Management*, pp. 211–229, Canada, Aug. 1992.
137. P. K. Chrysanthis and K. Ramamritham. "ACTA: A Comprehensive TransAction Framework for Extended Transactions." *Proc. of the 2nd IEEE Int'l Workshop on Research Issues on Data Engineering: Transaction and Query Processing*, pp. 221, Phoenix, AZ, Feb. 1992.
138. P. K. Chrysanthis and K. Ramamritham. "A Formalism for Extended Transaction Models." *Proc. of the 17th Int'l Conference on Very Large Data Bases*, pp. 103–111, Spain, Sept. 1991.
139. P. K. Chrysanthis, S. Raghuram and K. Ramamritham. "Extracting Concurrency from Objects: A Methodology." *Proc. of the 1991 ACM SIGMOD Int'l Conference on Management of Data*, pp. 108–117, San Diego, CA, May 1991.
140. P. K. Chrysanthis. "Redefining Transactions: A Formal Approach." *Proc. of the 1990 ECOOP/OOPSLA Workshop on Transactions and Objects*, pp. 11–16, Oct. 1990.

141. P. K. Chrysanthis and K. Ramamritham. "ACTA: A Framework for Specifying and Reasoning about Transaction Structure and Behavior." *Proc. of the 1990 ACM SIGMOD Int'l Conference on Management of Data*, pp. 194–203, Atlantic City, NJ, May 1990.
142. P. K. Chrysanthis and D. Stemple and K. Ramamritham. "A Logically Distributed Approach for Structuring Office Systems." *Proc. of the Conference on Office Information Systems*, pp. 11–20, Boston, MA, Apr. 1990.
143. P. K. Chrysanthis and K. Ramamritham. "Capturing the Structure and the Behavior of Complex Transactions." *Proc. of the 3rd Workshop on Large Grain Parallelism*, SEI, Carnegie Mellon University, Pittsburgh, PA, Oct. 1989.
144. E. Moss, B. Leban and P. K. Chrysanthis. "Finer Grained Concurrency Control for the Database Cache." *Proc. of the 3rd IEEE Int'l Conference on Data Engineering*, pp. 96–103, Los Angeles, CA, Feb. 1987.
145. P. K. Chrysanthis, K. Ramamritham, D. Stemple and S. Vinter. "The Gutenberg Operating System Kernel." *Proc. of the 1986 ACM/IEEE Fall Joint Computer Conference*, pp. 1159–1168, Dallas, TX, Nov. 1986.

INVITED PAPERS

1. R. Gheorghiu, A. Labrinidis, and P. K. Chrysanthis. "A user-friendly framework for database preferences." *Proc. of the 10th Intl Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom'14)*, pp. 205–214, Oct. 2014.
2. P. Neophytou, P. K. Chrysanthis, A. Labrinidis, "CONFLuEnCE: Implementation and Application Design." *Proc. of the 7th Int'l Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom'11)*, pp. 1-10, October 2011.
3. P. Neophytou, P. K. Chrysanthis and A. Labrinidis. "Towards Continuous Workflow Enactment Systems." *Proc. of the 4th Int'l Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom'08)*, Nov. 2008.
4. P. Xia, P. K. Chrysanthis, and A. Labrinidis. "Similarity-Aware Query Processing in Sensor Networks." *Proc. of the 14th Int'l Workshop on Parallel and Distributed Real-Time Systems (WPDRTS06)*, pp. 1–8, April 2006.

REFEREED DEMONSTRATIONS

1. N. R. Katsipoulakis, C. Thoma, E. A. Gratta, A. Labrinidis, A. J. Lee, P. K. Chrysanthis. "CE-Storm: Confidential Elastic Processing of Data Streams." *Proc. of the 2015 ACM SIGMOD Int'l Conference on Management of Data (SIGMOD'15)*, pp. 859–864, May 2015.
2. N. R. Ong, S. E. Rojcewicz, N. L. Farnan, A. J. Lee, P. K. Chrysanthis, T. Yu. "Interactive Preference-Aware Query Optimization." *Proc. of the 31st IEEE Int'l Conference on Data Engineering (ICDE'15)*, pp. 1–4, Apr. 2015.
3. N. L. Farnan, A. J. Lee, P. K. Chrysanthis, T. Yu. "PAQO: A Preference-Aware Query Optimizer for PostgreSQL." *Proc. of the Very Large Databases Conference (VLDB'13)*, 6(12):1334-1337, Aug. 2013.

4. N. L. Farnan, A. J. Lee, P. K. Chrysanthis, T. Yu. "Enabling intensional access control via preference-aware query optimization." *Proc. of the 18th ACM Symposium on Access Control Models and Technologies (SACMAT'13)*, pp. 189-192, June 2013.
5. P. Neophytou, R. Gheorghiu, R. Hachey, T. Luciani, D. Bao, A. Labrinidis, G. E. Marai, P. K. Chrysanthis. "AstroShelf: Understanding the Universe Through Scalable Navigation of a Galaxy of Annotations." *Proc. of the 31st ACM Int'l Conference on Management of Data (SIGMOD'12)*, pp. 1-4, May 2012.
6. P. Neophytou, P. K. Chrysanthis, and A. Labrinidis, "CONFLuEnCE: CONTinuous workFLow ExeCution Engine." In *30th ACM Int'l Conference on Management of Data (SIGMOD'11)*, pp. 1311-1314, June 2011.
7. J. Szwedko, C. Shaw, A. G. Connor, A. Labrinidis and P. K. Chrysanthis. "Demonstrating an evacuation algorithm with mobile devices using an e-scavenger hunt game." *Proc. of ACM Workshop on Data Engineering for Mobile and Wireless Access (MobiDE'09)*, pp. 49-52, June 2009.
8. P. Andreou, D. Zeinalipour-Yazti, M. Vassiliadou, P. K. Chrysanthis, G. Samaras. "KSpot: Effectively Monitoring the K Most Important Events in a Wireless Sensor Network." *Proc. of the 25th Int'l Conference on Data Engineering March (ICDE'09)*, pp. 1503-1506, May 2009.
9. V. Penkrot, J. Beaver, M. A. Sharaf, S. Roychowdhury, W. Li, W. Zhang, P. K. Chrysanthis, V. Liberatore, K. Pruhs. "An Optimized Multicast-based Data Dissemination Middleware: A Demonstration." *Proc. of 19th IEEE Int'l Conference on Data Engineering (ICDE'03)*, pp. 762-764, March 2003.
10. A. Massari, S. Pavani, L. Saladini, and P. K. Chrysanthis. "QBI: Query By Icons." (Demo Description) *Proc. of the 1995 ACM SIGMOD Int'l Conference on Management of Data (SIGMOD'95)*, pp. 477, San Jose, CA, May 1995.

REFEREED ABSTRACTS and POSTERS

1. P. H. Pisciuneri, A. Zheng, P. Givi, A. Labrinidis, and P. K. Chrysanthis. "Repartitioning Strategies for Massively Parallel Simulation of Reacting Flow." *Proc. of the 68th Annual Meeting of the APS Division of Fluid Dynamics (APS'15)*, 60(21):503, Nov. 2015.
2. A. U. Shein, P. K. Chrysanthis, and A. Labrinidis. "Scalable Processing of Aggregate Continuous Queries in a Distributed Environment." *Proc. of ACM Symposium on Cloud Computing (SoCC 2015)*, Aug. 2015.
3. P. H. Pisciuneri, E. Meneses, A. Zheng, A. Labrinidis, P. K. Chrysanthis, and P. Givi. "Load Balancing, Dynamic Repartitioning, and Data Migration in Turbulent Reactors' Simulation." *Proc. of the 15th Int'l Conference on Numerical Combustion (ICNC'15)*, April 2015.
4. P. K. Chrysanthis and A. Labrinidis. "Big Data Systems Research @Advanced Data Management Technologies Lab (ADMT), University of Pittsburgh." *NIST Cloud and Big Data workshop*, Jan. 2013.
5. S. Guirguis, P. Neophytou, P. K. Chrysanthis, A. Labrinidis, and K. Pruhs. "Expanding Continuous Queries Scope for Better Event Detection." *Workshop on Research Directions in Situational-aware Self-managed Proactive Computing in Wireless Adhoc Networks (SSPC'09)*, pp. 1-3, Mar. 2009.

6. D. Mosse, L. Comfort, A. Amer, J. C. Brustoloni, P. K. Chrysanthis, M. Hauskrecht, A. Labrinidis, R. Melhem, and K. Pruhs. "Secure-CITI Critical Information-Technology Infrastructure." *Proc. of the 7th Annual Int'l Conference on Digital Government Research*, pp. 253-254, May 2006
7. G. Santhanakrishnan, A. Amer, P. K. Chrysanthis. "A Goal-Oriented Self-Tuning Caching Algorithm." *Proc. of 23rd IEEE Int'l Performance Computing and Communications Conference*, Apr. 2004.
8. A. Berfield, J. Beaver and P. K. Chrysanthis. "Profile and context filtering of streaming data for a mobile personal assistant." *19th ACM SAC 2004*, pp. 1615-1616, Mar. 2004.
9. Z. Liu, P. K. Chrysanthis, F.C. Tsui. "A Comparison of Two View Materialization Approaches for Disease Surveillance System." *Proc. of ACM Symposium on Applied Computing*, pp. 754-755, Mar. 2004.
10. Oleg Shigiltchoff, P. K. Chrysanthis, Evaggelia Pitoura. "Energy Efficient Access in Multiversion Broadcast Environment." *Proc. of the 5th Int'l Conference on Mobile Data Management*, pp. 168, Jan. 2004.
11. S. Papastavrou, G. Samaras, P. Evripidou, P. K. Chrysanthis. "Parse & Dispatch: Parallelizing the Generation of Dynamic Web Content." The 12th Int'l World Wide Web Conference, May 2003. (short paper, poster)
12. W. Li, W. Zhang, V. Liberatore, V. Penkrot, J. Beaver, M. A. Sharaf, S. Roychowdhury, P. K. Chrysanthis, and K. Pruhs. "An Optimized Multicast-based Data Dissemination Middleware: A Demonstration." *Proc. of 19th Int'l Conf. on Data Engineering*, Mar. 2003.
13. C. Spyrou, G. Samaras, E. Pitoura, S. Papastavrou, and P. K. Chrysanthis. The Dynamic View System (DVS): Mobile Agents to Support Web Views. (Demo Description) In *the 17th Int'l Conf. on Data Engineering*, pp. 30-32, 2001.
14. H. Karimi, P. Krishnamurthy, S. Banerjee, P. K. Chrysanthis, D. Tipper and K. Pahlavan. "Distributed Mobile GIS." *GIM (Geomatics Information Magazine) International*, Vol. 14, No. 9, pp. 80-82, Sept. 2000.
15. K. Tew, P. K. Chrysanthis and Mossé. "Empirical Evaluation of Task and Resource Scheduling in Dynamic Real-Time Systems." *Proc. of the IEEE Real-Time Systems Symposium, Special Track on Work in Progress*, pp. 35-38, D.C., Dec. 1996.
16. Y. J. Al-Houmaily and P. K. Chrysanthis. "In Search for an Efficient Real-Time Atomic Commit Protocol." *Proc. of the IEEE Real-Time Systems Symposium, Special Track on Work in Progress*, pp. 51-54, D.C., Dec. 1996.

EDITORIALS and POSITION PAPERS

1. P. K. Chrysanthis. "The Singularity of real-time analytics", *Proc. of the 10th Int'l Workshop on Enabling Real-Time Business Intelligence (BIRTE'16)*, Sept. 2016.
2. Evaggelia Pitoura and P. K. Chrysanthis. "Mobility and Big Data: adding an M to the Vs, or not?" (Panel Abstract). *16th IEEE International Conference on Mobile Data Management*, June 2015.

3. P. K. Chrysanthis and A. Labrinidis. "Resource and Human-constraint Data Processing." *Collection of White Papers of the NSF Workshop on Social Networks, Mobility and the Cloud*, Feb. 2012.
4. S. Chen, P. K. Chrysanthis and A. Labrinidis. "Exploiting Flash for Energy Efficient Disk Arrays." *Collection of White Papers of the NSF Workshop on Sustainable Energy-Efficient Data Management*, May 2011.
5. P. K. Chrysanthis. "AQSIOs - Next Generation Data Stream Management System." *CONET Newsletter (CONET)*, 1(9):1-3, June 2010.
6. P. K. Chrysanthis and K. Pruhs. "Sustainable Computing." *CNSF Congressional Exhibit*, Washington DC, April 2010.
7. P. K. Chrysanthis. "20 years of mobile data management research: vision and reality." (Panel Abstract), *Proc. of ACM Workshop on Data Engineering for Mobile and Wireless Access (MobiDE'09)*, June 2009.
8. P. K. Chrysanthis and A. Labrinidis. "Facilitating the Building of Data-Intensive Applications.", *Collection of Whitepapers of the NSF IIS-GENI Workshop*, Nov. 2006.
9. P. K. Chrysanthis. Power-Aware Data Management and the Third Law of Compu-Dynamics." (keynote Abstract) *Proc. of the 5th Hellenic Symposium on Data Management (HDMS'06)*, p. 7, Sept. 2006.
10. P. K. Chrysanthis. "Power-Aware Data Management and the Third Law of Compu-Dynamics." (Invited Talk Abstract) *Proc. of. Dagstuhl Seminar 06431 - Scalable Data Management in Evolving Networks*, Oct. 2006.
11. P. K. Chrysanthis. "Advanced Data Management Technologies Lab @ U. Pittsburgh." (Presentation Abstract) *Proc. of. Dagstuhl Seminar 06431 - Scalable Data Management in Evolving Networks*, Oct. 2006.
12. J-H Bosse, S. Böttcher, P.K. Chrysanthis, A Delis, L. Gruenwald, A. Mondal, S. Obermerier, G. Samaras and S. Viglas. "Atomicity in Mobile Networks." (Working Group Summary) *Proc. of. Dagstuhl Seminar 06431 - Scalable Data Management in Evolving Networks*, Oct. 2006.
13. P. A. Boncz, A. Bonifati; J-H. Böse, S. Böttcher, P.K. Chrysanthis, L. Gruenwald, A. Illarramendi, P. Janacik, B König-Ries, W. May, A. Mondal, S. Obermeier, A. Ouksel, and G. Samaras. "P2P, Ad Hoc and Sensor Networks . All the Different or All the Same?" (Working Group Summary) *Proc. of. Dagstuhl Seminar 06431 - Scalable Data Management in Evolving Networks*, Oct. 2006.
14. P. K. Chrysanthis. "Data in Crisis Management: An Exercise for Mobile databases, Sensor databases and Peer-to-Peer databases." *Proc. of Dagstuhl Seminar 05421: Data Always and Everywhere - Management of Mobile, Ubiquitous, Pervasive, and Sensor Data*, Oct. 2005.
15. S. Banerjee, M. Cherniack, P. K. Chrysanthis, V. Kumar, A. Labrinidis. "Report on MobiDE 2003: The 3rd Int'l ACM Workshop on Data Engineering for Wireless and Mobile Access." *SIGMOD Record*, 34(1): 70-74, March. 2005.

16. A. Zaslavsky, P. K. Chrysanthis and V. Kumar. "Mobility in databases and distributed systems: summing up achievements of the past decade (Editorial)." *Special Issue of ACM Mobile Networks Journal*, 9(5): 455-457, Oct. 2004.
17. S. Banarjee and P. K. Chrysanthis. "Special issue on Mobile Data Management: Guest editors' preface." *ACM SIGMOBILE Mobile Computing and Communications Review (MC2R)*, 8(3):1-3, July 2004.
18. P. Bernstein (Microsoft), A. Borgida (Rutgers), M. Carey (BEA), S. Chaudhuri (Microsoft), P. Chrysanthis (U. Pittsburgh), C. Clifton (Purdue), U. Dayal (HP), D. Florescu (BEA), M. Franklin (UC-Berkeley), L. Gasser (UIUC), J. Gehrke (Cornell), S. Ghandeharizadeh (USC), A. Halevy (U. Washington), H.V. Jagadish (U. Michigan), H. Korth (Lehigh), R. Ramakrishnan (U. Wisconsin), A. Rosenthal (Mitre), S. Sripada (Boeing), J. Srivastava (U. Minnesota), J. Su (UCSB), D. Suci (U. Washington), S. Thatte (Microsoft), B. Thuraisingham (NSF), V. Tsotras (UCR), J. Widom (Stanford), M. Winslett (UIUC), O. Wolfson (UIC), J. Yuan (Boeing), and M. Zemankova (NSF). "Science of Design for Information Systems - Report of the NSF Workshop, Seattle, 2003." *SIGMOD Record*, 33(1): 133-137, Mar. 2004. (Co-author the actual NSF report as well.)
19. P. K. Chrysanthis, M. Sloman and A. B. Zaslavsky. "Mobile Data Management (Editorial)." *IEEE Distributed Systems Online*, Special issue on 4th Int'l Conference on Mobile Data Management (MDM 2003), Oct. 2003.
20. P. K. Chrysanthis, M. Sloman and A. B. Zaslavsky. "Report on the 4th Int'l Conference on Mobile Data Management." *SIGMOD Record*, 32(3): 103-106, Sept. 2003.
21. P. K. Chrysanthis, V. Kumar and E. Pitoura. "Overview of the IEEE Tutorial on Data Engineering for Mobile and Wireless Access." *Proc. of the 16th IEEE Int'l Conference on Data Engineering*, Mar. 2003.
22. S. Banerjee and P. K. Chrysanthis. "Peer Support in a Mobile World" *Proc. of the NSF Workshop on Context-Aware Data Management*, Jan. 2002.
23. P. K. Chrysanthis and E. Pitoura. "Overview of the IEEE Tutorial on Mobile and Wireless Database Access for Pervasive Computing." *Proc. of the 16th IEEE Int'l Conference on Data Engineering*, Mar. 2000.
24. P. K. Chrysanthis. "CAREER: Developing Pragmatic Mobile Data Management Systems." *Proc. of the NSF Information and Data Management Workshop*, Mar. 1998, Mar. 1999, and Mar. 2000.
25. S. Banerjee and P. K. Chrysanthis. "Reliable Data Sharing in Wide Area Gigabit Networked Databases." *Proc. of the NSF Information and Data Management Workshop*, Mar. 1999, Mar. 2000, Apr. 2001 and May 2002.
26. P.K. Chrysanthis and J. Klavans. "Executive Summary of the 1998 NSF Information and Data Management Workshop." *Proc. of the 2000 NSF Information and Data Management Workshop*, Mar. 2000.
27. P. K. Chrysanthis. "Data Management in Mobile Computing." *Session on Mobile Computing, 1997 AAAS Annual Conference*, Feb. 1997.

28. Y. Al-Houmaily, S. Levitan and P.K. Chrysanthis. "Commit Processing in Distributed, Heterogeneous and Multidatabase Systems." *Fifth Annual Graduate Research Review*, Electrical Engineering Department, University of Pittsburgh, Apr. 1996.
29. S. Frezza, S. Levitan and P.K. Chrysanthis. "Requirements-Based Design Evaluation." *1995 N.S.F. Design and Manufacturing Grantees Conference*, Jan. 1995.
30. P. K. Chrysanthis. "Transaction and Activity Management in Massive Digital Data Systems" *Massive Digital Data Systems Workshop*, Intelligence Community, Feb. 1994.
31. P. K. Chrysanthis and K. Ramamritham. "A Status Report of the ACTA Transaction Modeling Framework," *DARPA Open OODB Workshop II: Workshop on Open OODB Module Interfaces*, Sept. 1991.

OTHER PUBLICATIONS

1. A. B. Zaslavsky, P. K. Chrysanthis, C. Becker, J. Indulska, M. F. Mokbel, D. Nicklas, C-Y Chow (Eds.). "Chairs Message." *Proc of IEEE 15th Int'l Conference on Mobile Data Management (MDM'14)*, Volume 1&2, July 2014.
2. A. Zaslavsky, P. K. Chrysanthis and D. Lee. "General Chairs Message. IEEE Int'l Conference on Mobile Date Management", *Proc. of the 12th Int'l IEEE Conference on Mobile Data Management (MDM'11)*, June 2011.
3. A. P. Buchmann and P. K. Chrysanthis. "PC Co-chairs Message. OTM Conferences", *Proc. of the Int'l Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE'10)*, p. 918, Oct. 2010.
4. P. K. Chrysanthis, C. Jensen, A. Labrinidis, and V. Kumar. "Preface." *Proc. of the 5th Int'l ACM Workshop on Data Engineering for Wireless and Mobile Access*, pp. iii, June 2006.
5. P. K. Chrysanthis and G. Samaras. "General Chair's Welcome Message." *Proc. of the 6th Int'l Conference on Mobile Data Management*, pp. iii, May 2005.
6. P. K. Chrysanthis and E. Pitoura. "Special issue on Pervasive Computing and Communications: Guest Editors' preface," *ACM Wireless Networks*, 10(6):629-630, Nov. 2004.
7. P. K. Chrysanthis, S. Banerjee and M. Cherniack. "MobiDE'03 Conference Chairs Preface." *Proceedings of the ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access*, pp. iii-iv, Sept. 2003.
8. M.S. Chen, P. K. Chrysanthis, M. Sloman and A. Zaslavsky. "Editors Preface to the Proceedings of the 4th Int'l Conference on Mobile Data Management", Jan. 2003.
9. K. Ramamritham, P. K. Chrysanthis and E. Pitoura. "Introduction to the Proceedings of the Second ACM Int'l Workshop on Data Engineering for Mobile and Wireless Access.", May 2001.
10. A. Zaslavsky, P. K. Chrysanthis and V. Kumar. "Introduction to the Proceedings of the 3rd DEXA Int'l Workshop on Mobility in Distributed and Database Systems," Sept. 2000.
11. A. Zaslavsky and P. K. Chrysanthis. "Introduction to the Proceedings of the 2nd DEXA Int'l Workshop on Mobility in Distributed and Database Systems," Sept. 1999.

12. P. K. Chrysanthis and E. Pitoura. "Introduction to the Proceedings of the ACM Int'l Workshop on Data Engineering for Mobile and Wireless Access", Aug. 1999.
13. P. K. Chrysanthis. "Guest Editor's Introduction to Special Issue on Workflow Systems." *Distributed Systems Engineering*, 3(4):211–212, Dec. 1996.

KEYNOTE PRESENTATIONS

- 2016 Joint Conference on Medical Informatics in Taiwan – Active Ageing with Smart Technology*, "User-centric Techniques for Big Data Exploration," June 11, 2016
- IEEE Data and Services Management in Mobile Environments workshop*, "20 Years of Mobile Data Management Research: Vision and Reality," April 7, 2008.
- Hellenic Symposium on Data Management*, "Power-Aware Data Management and the Third Law of Compu-Dynamics," September 7, 2006.

INVITED PRESENTATIONS

- Indian Institute of Technology, Bombay*, "Processing Aggregated Continuous Queries," Sept. 14, 2016
- University of Cyprus*, "Recommending Interesting Visualizations for Data Exploration," June 1, 2016.
- University of Cyprus*, "Preference-based Big Data Exploration," August 1, 2015.
- University of Massachusetts, Amherst*, "AQSIOS: Handling Big Streaming Data" (Symposium on Computer Science and Engineering), May 2, 2015.
- University of Cyprus*, "Load Management for Big Streaming Data," August 31, 2014.
- University of Maryland*, "Handling the Three Vs of Big Data with DILoS", May 2013.
- University of Cyprus*, "Efficient Scheduling of Heterogeneous Continuous Queries in AQSIOS," Feb. 16, 2007.
- University of Ioannina, Greece*, "Data Management Techniques for Sensor Networks", Dec. 11, 2006.
- Dagstuhl Seminar 06431, Scalable Data Management in Evolving Networks*, "Power-Aware Data Management and the Third Law of Compu-Dynamics," Oct. 24, 2006.
- Dagstuhl Seminar 05421 on Data Always and Everywhere - Management of Mobile, Ubiquitous, Pervasive, and Sensor Data*, "Data in Crisis Management: An Exercise in Mobile databases, Sensor databases and Peer-to-Peer databases," Oct. 17, 2005.
- Carnegie Mellon University*, "Efficient Data Dissemination to Mobile Clients in E-Commerce Applications," July 8, 2001.
- HP Labs, Paolo Alto, CA*, "Efficient Data Dissemination to Mobile Clients in E-Commerce Applications," June 20, 2001.
- University of Massachusetts, Amherst*, "Improving Access Time to Air Caches While Saving Energy," May 14, 2001
- Georgetown University*, "Efficient Data Dissemination to Mobile Clients in E-Commerce Applications," April 25, 2001.
- Case Western Reserve University*, "Efficient Data Dissemination to Mobile Clients in E-Commerce Applications," March 30, 2001.

Carnegie Mellon University, "Scaling to Mega Data Servers without using Application Semantics," June 23, 2000.

University of Ioannina, Greece, "Scaling to Mega Data Servers without using Application Semantics," May 31, 2000.

Carnegie Mellon University, "Object-Relational Databases," March 9, 2000.

Carnegie Mellon University, "Data Management for Mobile Computing," Oct. 12, 1999.

Honors College, University of Pittsburgh "Y2K: Myths, Merits and Misunderstandings of an Otherwise Ordinary Year," Feb. 19, 1999.

New Mexico Institute of Technology, "PRO-MOTION: Database Access While in Motion," Nov. 2, 1998.

New Mexico Institute of Technology, "High Performance Data Servers in Wide Area Gigabit Networks," May 2, 1998.

Polytechnic University of New York City, "High Performance Database Servers in Wide Area Gigabit Networks," Nov. 24, 1997.

University of Pittsburgh, Department of Electrical Engineering, "Modeling Activities and Workflows Using ACTA," Oct. 9, 1995.

Universita di Roma "La Sapienza," Italy, "Systematic Synthesis of Extended Transactions using ACTA," July 18, 1994.

Universita di Roma "La Sapienza," Italy, "An Overview of the Object Data Management Standardization," July 12, 1994.

ETH Zurich, Zurich, Switzerland, "Modeling Workflows Using ACTA," Oct. 1993.

Oracle Corporation, Redwood City, CA, "Modeling Activities Using ACTA," June 1993.

Texas University A&M, TX, "ACTA, A Framework for Specifying and Reasoning about Extended Transactions," April 1991.

AT&T Bell Labs, Murray Hill, NJ, "ACTA, A Framework for Specifying and Reasoning about Extended Transactions," April 1991.

Bellcore, Morristown, NJ, "ACTA, A Framework for Specifying and Reasoning about Extended Transactions," April 1991.

University of Chicago, Chicago, IL, "ACTA, A Framework for Specifying and Reasoning about Extended Transactions," March 1991.

Boston University, Boston, MA, "ACTA, A Framework for Specifying and Reasoning about Extended Transactions," March 1991.

PANELIST

"Mobility and Big Data: adding an M to the Vs, or not?" in *the 16th IEEE International Conference on Mobile Data Management*, Pittsburgh, PA, June 2015 (Co-Chair)

"BigData - Challenges and Opportunities" in *the 10th Int'l Conference on Collaborative Computing: Networking, Applications and Worksharing*, Miami, FL, Oct. 2014.

"Collaboration and Social Networks" in *the 7th Int'l Conference on Collaborative Computing: Networking, Applications and Worksharing*, Orlando, FL, Oct. 2011.

- “Mobile Peer-to-Peer Computing Challenges” in *the 5th Int’l Conference on Mobile Data Management*, Cyprus, May 2005.
- “Lowell Report on Future of Data Management” in *the 3rd Hellenic Symposium on the Management of Data*, Greece, Sept. 2004.
- “Transactions and Objects” in *OOPSLA/ECOOP Workshop*, Canada, Oct. 1990.
- “Being a Foreign Teaching Assistant” in *Human Relations Workshop for New Foreign Teaching Assistants*, Office of Human Relations, University of Massachusetts, Amherst, Sept. 1987.

TUTORIALS, ADVANCED SEMINARS and SHORT COURSES

- “Graph Partitioning in Distributed Graph Computation,” University of Diaspora at University of Cyprus, June 2016.
- “Scheduling continuous queries in data stream management systems” (co-taught with M. A. Sharaf and A. Labrinidis), VLDB 2008, August 2008.
- “Network-Aware Wireless Sensor Data Management.” (co-taught with V. Zadoroshny), Advanced Seminar, MDM 2006, May 2006.
- “Data Engineering for Mobile and Wireless Access” (Co-taught with E. Pitoura, V. Kumar), half-day tutorial, ICDE 2003, March 2003.
- “Mobile and Wireless Database Access for Pervasive Computing” (Co-taught with E. Pitoura), half-day tutorial, ICDE 2000, February 2000.
- “Concurrency Control and Transaction Processing” (Co-Taught with K. Ramamritham), 1 day tutorial, Part of the 6th International Conference on Management of Data, December 1994.
- “Object Data Management Systems,” half-day tutorial, University of Salerno, Italy, July 1994.
- “Extended Transaction Models,” half-day tutorial, University of Salerno, Italy, July 1994.
- “Object-Oriented Database Management Systems,” 3 days short course, Institute of Systems Science, National University of Singapore, June 1994. (National Science Foundation’s APEC)

RESEARCH FUNDING and AWARDS

Funded Grant Awards: Principle Investigatorships

1. “Transaction Support for Advanced Database Applications,” *DEC Equipment Allowance*, Oct. 1991.
2. “Consistency in Multidatabase Systems – Specification and Maintainance,” *Research Development Fund, University of Pittsburgh*, June 1992 - June 1994.
3. “Understanding Autonomy and Consistency in Multidatabase Systems,” *National Science Foundation, Research Initiation Award*, Aug. 1992 - Jan. 1996.
4. “Disconnected Mobile Database Operations,” *B-Right Trucking Company*, Sept. 1994 - Aug. 1995.
5. “Developing Pragmatic Mobile Data Management Systems,” *National Science Foundation, CAREER Award*, July 1995 - Aug. 2000.
6. “Data Access and Recovery in High Speed Wide Area Networked Databases,” *National Science Foundation*, with Sujata Banerjee of IS&Telecomm, Sept. 1998 - Aug. 2001.

7. "Intelligent Workflow Management," *DARPA* (Supplement to AFOSR Grant "Agents for Dynamic Plan Management) with M. Pollack (PI) and Chrysanthis (co-PI), Apr. 1999 - Nov. 1999.
8. "Plan Management Capabilities for Autonomous Agents: Extending the Basic Mechanisms," AFOSR-DARPA (Contract # F30602-00-0547), with M. Pollack, Mar. 2000 - June 2001.
9. "Continued Development of a Health-System-Resident Detection Component for National Electronic Disease Surveillance," *National Center for Disease Control* with Rich Tsui of the Center of Bioinformatics (PI), Oct. 2001 - Oct. 2002.
10. "Building an Early Warning Public Health Surveillance System", *Pennsylvania Department of Health* with Michael M. Wagner (PI) and Rich Tsui (Co-PI) of the Center of Bioinformatics and Chrysanthis (Co-PI), July 2002 - June 2005.
11. "Collaborative Research: Middleware Support for Multicast Data Dissemination," *NSF, ANI-0123705*, with Kirk Pruhs and Vincenzo Liberatore of Case Western Reserve University, Oct. 2002 - Aug 2005.
12. "A Demonstration of the Integrated, Interactive, Spatial Information System, with Additional Modules of Decision Support," *Mountaintop Technologies*, PI with L. Comfort of GSPIA and A. Labrinidis, Aug. 2005 - Dec. 2005.
13. "Modeling Immunity for Biodefense," *National Institute of Health-NIAD*, Co-PI with P. Morel of School of Medicine (PI), Oct. 2005 - Nov. 2011.
14. "Algorithms and Metrics for New Generation Data Stream Management Systems," *NSF, ANI-0534531*, with A. Labrinidis and K. Pruhs (co-PIs), Mar. 2006 - Feb 2011.
15. "CDI-Type II: Understanding the Universe through Scalable Navigation of a Galaxy of Annotations", *NSF-CCF, OIA-1028162*, Co-PI with A. Labrinidis (PI), L. Marai (Co-PI) and two Co-PIs from Pitt Physics and Astronomy, Sept. 2010 - Aug. 2016.
16. "EAGER: Energy-Efficient Transaction Processing," *NSF, IIS-1050301*, with A. Labrinidis (co-PI), Sept. 2010 - Aug. 2012.
17. "Data Management and Visualization in Petascale Turbulent Combustion Simulation," *NSF, CDS&E-1250171*, Co-PI with Peyman Givi (PI), A. Labrinidis (Co-PI), L. Marai (Co-PI) and S. Yilmaz (Co-PI), Sept. 2012 - Aug. 2017.
18. "Center for Causal Modeling and Discovery of Biomedical Knowledge from Big Data (CCD)", *NIH Big Data to Knowledge (BD2K)*, Co-I with G. Cooper of DBMI (PI), Sept. 2014 - Aug. 2018.
19. "Appraisal of Subgrid Scale Closures in Reacting Turbulence via DNS Big Data," *NSF, CDS&E-1609120*, Co-PI with Peyman Givi (PI), A. Labrinidis (Co-PI), and W. Layton (Co-PI), Sept. 2016 - Aug. 2019.

Funded REU – Research Experience for Undergraduates

1. "Transaction-Oriented Computing," *National Science Foundation, Research Experiences for Undergraduates*, Aug. 1994 - Jan. 1996.
2. "Developing Pragmatic Mobile Data Management Systems," *National Science Foundation, Research Experiences for Undergraduates*, June 1996 - Aug. 2000.
3. "Data Access and Recovery in High Speed Wide Area Networked Databases," *National Science Foundation*, with Sujata Banerjee of IS&Telecomm, Sept. 1998 - Aug. 2001.

4. "Collaborative Research: Middleware Support for Multicast Data Dissemination," *NSF, ANI-0123705*, with Kirk Pruhs and Vincenzo Liberatore of Case Western Reserve University, Oct. 2002 - Aug. 2005.
5. "Web Databases and Services," *University of Pittsburgh, A&S Freshmen Research Experience*," with Alexandros Labrinidis, Spring term 2004.
6. "Algorithms and Metrics for New Generation Data Stream Management Systems," *NSF, IIS-0534531*, with A. Labrinidis and K. Pruhs (co-PIs), Aug 2009 - Feb 2011.
7. "Increasing the energy proportionality of hard disk drives at the array level (RAID)" *NSF, IIS-1050301*, with A. Labrinidis (co-PIs), May 2011 - Aug 2012.

Funded Collaborative Grand Awards & Co-Investigatorships

1. "MATHON: Location Management for Mobile Agents." (Research Collaboration among Universities of Cyprus, Ioannina and Pittsburgh.), *Research Council of Republic of Cyprus*, with G. Samaras of U. Cyprus (PI), Jan. 2001 - Jun. 2002.
2. "Intelligent Assistance for Activity Planning in Space Facilities," *Metrica Inc.-NASA* with Richard Simpson of Public Health, Feb. 2001 - April 2002.
3. "Augmented Manufacturing using a Context Aware Computing Infrastructures", *Pennsylvania Infrastructure Technology Alliance (PITA)*, with Smailagic of CMU (PI) and Siewiorek, Surbu, Chrysanthis (Co-PIs), Nov. 2001 - Dec. 2002.
4. "Technology Enhanced Team Based Design: Collaboration across time and spacing using a pervasive computing infrastructure" *Pennsylvania Infrastructure Technology Alliance (PITA)*, with Smailagic of CMU (PI) and Siewiorek, Hills, Chrysanthis (Co-PIs), Nov. 2001 - Dec. 2002.
5. "Developing a Unified Message Management System", *Research Council of Republic of Cyprus, PENEK*, with P. Evripidou (PI), Nov. 2003 - May 2004.
6. "Secure CITI: A Secure Critical Information Technology Infrastructure for Disaster Management", *NSF-ITR*, with D. Mossé (PI), Sept. 2003 - Aug. 2008.
7. "NSF IDM Workshop Web Repository," *National Science Foundation*, with with A. Labrinidis and P. Agouris of U. of Maine, Apr. 2005 - May 2006.
8. "Data Managements in Mobile Ad Hoc Networks" *Greek Secretary of Research & Technology: Pythagoras*, US Collaborator with I. Manolopoulos of U. Thessaloniki (PI) and A. Labrinidis (US Collaborator), Sept 2005 - July 2007.
9. "DanDy: Data Quality in Dynamic Networks." *Greek Secretary of Research & Technology*, with E. Pitoura of U. of Ioannina (PI), Jan. 2006 - Dec. 2007.

Funded Workshop Grand Awards Principle Investigatorships

1. "1998 NSF Information and Data Management Workshop: Research Agenda for the 21st Century," *National Science Foundation-IDM*, with J. Klavans of Columbia University, Mar. 1998 - Feb. 2000.
2. "Travel Grant for Graduate Students to Attend the Third ACM International Workshop on Data Engineering for Wireless and Mobile Access (MobiDE'03)," *National Science Foundation-IDM* with A. Labrinidis, April 2003 - May 2004.

3. "NSF Workshop on Data Management for Mobile Sensors (MobiSensors)", *National Science Foundation-IIS* with A. Labrinidis, Sept 2006 - Aug 2007.
4. "NSF Workshop on Sustainable Energy-Efficient Data Management", *NSF, IIS-1050302*, Sept. 2010 - Aug 2011.

STUDENT ADVISING & MENTORING

PhD Theses Supervised:

- Chien-Tsai Liu (CS), August 1994 (Co-advicored S.K. Chang)
Database Schema Evolution through the Specification and Maintenance of Changes on Entities and Relationships.
- Yousef J. Al-Houmaily (EE), April 1997 (Co-advicored S. Levitan)
Commit Processing in Distributed, Heterogeneous and Multidatabase Systems.
- Susan Weissman (CS), August 2001
The View Holder Approach: Utilizing Customized Materialized Views to Create Database Services Suitable for Mobile Database Applications.
- Jonathan Beaver (CS), April 2006 (Co-advicored K. Pruhs)
An Improved Hybrid Data Dissemination Model.
- Mohamed A. Sharaf (CS), August 2007 (co-advicored A. Labrinidis)
Metrics and algorithms for processing multiple continuous queries
- Mohamed Aly (CS), April 2009 (co-advicored with Kirk Pruhs)
Load Balancing Hotspots in Sensor Storage Systems.
- Stavros Papastavrou (CS, U. Cyprus), June 2009 (co-advicored with George Samaras)
Materialization Algorithms for Dynamic Web Database Applications.
- Shenoda Giurgius (CS), December 2011 (co-advicored with Alexandros Labrinidis)
Scalable Processing of Multiple Aggregate Continuous Queries.
- Panayiotis Neophytou, December 2011 (co-advicored with Alexandros Labrinidis)
Continuous Workflows: From Model to Enactment System
- Lory Al Moakar, August 2013 (co-advicored with Alexandros Labrinidis)
Class Based Continuous Query Scheduling in Data Stream Management Systems.
- Qinglan Li, August 2013 (co-advicored with Alexandros Labrinidis)
A user-driven annotation framework for scientific data.
- Roxana Gheorghiu, May 2014 (co-advicored with Alexandros Labrinidis)
Unifying Qualitative and Quantitative Database Preferences to Enhance Query Personalization.
- Thao N. Pham, May 2016 (co-advicored with Alexandros Labrinidis)
'Exploiting the Synergy between Scheduling and Load Shedding to Facilitate Differentiated Levels of Service for Continuous Queries.

Current PhD Theses Advising:

- Anatoli Shein (area: Data Streams)
- Xiaoyu Ge (area: Big Data)
- Nick Katsipoulakis (area: Data Streams) (co-advising with Alexandros Labrinidis)
- Vineet Raghu (area: Bioinformatics) (co-advising with Takis Benos)

PhD Committees Member:

C. Gong (CSD, Dec. 1994), Stephen Freeza (EE, Dec. 1995), Lory Molesky, (UMass CSD, University of Massachusetts, Amherst, Aug. 1996), Robert Kramer (CSD, Apr. 1996), Fahad H Hoymany (CSD, Aug. 1997), P.W. Chen, (CSD, Comps, Mar. 1998), A.R. Al-Jadhai (CS, Apr. 1999), Clara C. Jaramillo (CSD, Aug. 2000), Miguel Labrador Perez (Telcomm, Dec 2000), Yannis Tsamardinos (ISP, June 2001), Shuju Wu (Telcomm, Aug. 2004) Kamol Kaemarungsi (Telcomm, Feb. 2005), Stavros Harizopoulos (CSD, Carnegie-Mellon University, Sept 2005) Anandha Gopalan (CSD, Comps, Nov. 2005), Ralph Sprang (COE, Proposal, Feb. 2006), David McWherter (CSD, Carnegie-Mellon University, proposal, May 2006), Darin Chan (CSD, Flinders University, Australia, Aug. 2006) Greg Kapfhammer (CSD, Apr. 2007), Huiming Qu (CSD, Aug. 2007), Jie Xu (CSD, Proposal, Dec 2007), David Essary (CSD, Apr. 2008), Mohammad Al-Amari (CSD, University of Sydney, Australia, Mar 2009), Christine Chung (CSD, Aug. 2010), Panayiotis Andreou (CSD, University of Cyprus, June 2011), Jonathan Misurda (CSD, Dec. 2011), Marina Drosou (CSD, University of Ioannina, Greece, Dec. 2013), Nicholas Farnan (CSD, Dec. 2015), Akon Dey (CSD, University of Sydney, Australia, Oct. 2015), William Garrison (CSD, Dec. 2015), Jie Guo (EE, May 2016).

MS Thesis Supervised:

Di Bao, Dec. 2013 (co-advising with Alexandros Labrinidis)
SNET - Computer-Assisted Supernovae Tracking

Alex Conon, Dec. 2012 (co-advising with Alexandros Labrinidis)
Ariadne: A Novel High Availability Cloud Data Store with Transactional Guarantees

MS Projects Supervised:

Jose Michael Joseph, May 2016
Efficient Processing of Aggregate Continuous Queries

Samanvay Reddy Panati, May 2016
Mobile Personal Guide: The Case of Preferential Diverse Routing

Jeff Kaminski, August 2014
Personal Book Library and Journal System on the Web

Wen Gao, April 2014
Open Access ADMT Library

Ruhsary Rexit, April 2014
Using a Distributed Search Engine to Identify Optimal Product Sets for Use in an Outbreak Detection System

Daniel Walker, December 2013
GPU Database Systems

Panayiotis Neophytou, April 2012
Optimizing the Energy Consumption of Continuous Query Processing with Mobile Clients

Sean Snyder, April 2011
QMD: Exploiting Flash for Energy Efficient Disk Arrays

Jesse Szwedko, April 2011
Visualization of Energy Consumption of Continuous Query Processing with Mobile Clients

- Ganesh Santhanakrishna, August 2005 (with Ahmed Amer)
Self-tuning Caching Algorithms
- Andreea Munteanu, August 2005 (with Alexandros Labrinidis)
Schemes for Fault-Tolerance in Sensor Networks
- Swati Gupta, April 2004
Performance evaluation of Broadcast Indexing Schemes
- Jonathan Beaver, April 2004
Document Selection and Bandwidth Division in Multicast-based Data Dissemination
- Oleg Shigiltchhoff, December 2003
Multiversion Data Dissemination: Broadcast Organizations and Caching
- Patrick Herron,, December 2003
Multi-channel Data Broadcasting
- Zhen Liu, April 2003
Evaluating Caching Schemes for High Volume Updates and Queries
- Joshua Gould, April 2003
Multi-channel Proxy Clients for Web Browsers
- Vince Penkrot, December 2002
Interfacing Real-time Outbreak and Disease Surveillance with Multicast Data Dissemination Middleware
- Thalis Kalfigopoulos, August 2002
Utilizing XML in e-Service Marketplaces
- Siddhartha Roychowdhury, August 2002
NAL: A Network Adaptation Layer
- Mohamed A. Sharaf, August 2002
STOBS: Summary Tables On-Demand Broadcast Scheduler.
- Chad Visino, December 2001
Developing Services and Utilities for Coordinating and Accessing Data from a Mobile Device Running Windows CE.
- Ruchi Agrawal, December 2000
Accessing Broadcast Data on Multiple Channels in Mobile Environment more Efficiently.
- Anand Deshpande, April 2000 (Co-Advisor S. Banerjee)
Read-only Optimization for the Group Two-Phase Locking Protocol.
- George Kyrou, December 2000
DTPSim: Distributed Transaction Processing Simulator.
- Stavros Papastavros, April 2000
An Evaluation of the Java-based Approaches to Web Database Access.
- Jeff Pike, December 1999.
Evaluation of Atomic Commit Protocols in Wide-Area Network Environments.
- Kasi Somayajula, December 1996.
Mobile Query Materialization.
- Ken Tew, September 1996 (Co-Advisor D. Mossé)
Process Scheduling with Temporal and Memory Constraints.

Ramesh Seshadri, April 1996.

Implementation of Scheduling Tool as a Workflow Application using CORBA.

Susan Weissman, April 1995.

Changing Query by Icons to Improve Query Processing for Mobile Users.

Gary D. Walborn, April 1994

Disconnected Mobile Database Operations.

Rakesh K. Aggarwal, April 1994.

Development of a Client with an X-Window Interface to Access a Remote Database.

John Candee, April 1994.

Exploration and Adaptation of a Commercially Available Network Interface for Remote Database Access across Heterogeneous Operating Systems.

Shubhangi Karandikar, August 1993.

Menu Driven Construction of Dynamic Database Queries.

Neeta Borle, June 1993.

Computer Science Department's Publication Database.

MS Committees:

Loukas Paraskeva (CSD, University Cyprus, May 2007)

Heart Disease Sensor Monitoring System

Brian Wongchaowart (CSD, Aug. 2010)

Oblivious Enforcement of Hidden Information Release Policies Using Online Certification Authorities

Panagiotis Tzirakis (CSD, University of Crete, Greece, October 2015)

Implementing Feature Selection Algorithms for Big Data

BS Thesis/Projects Completed:

Andreas Pamporis, CSD, University of Cyprus, May 2007 (Co-Adviser with G. Samaras)

ETC: Optimizing the Construction of Query Routing Trees in Sensor Networks for Energy Efficiency and Quality of Data

Anna Sialarou, CSD, University of Cyprus, May 2007 (Co-Adviser with G. Samaras)

E-Voting: Implementing Democracy using the Internet

BS Internships Supervised:

Ben Ailes (Fall 2003), C. Cohen (Summer 1993), A. Ferguson III (Summer 1994), R. Seshadri (Summer 1994) R. Colwell (REU 1995-96), H. Gelman (REU, 1995), L. Theophanous (from GMU, Summer 1995), P. Tomsick (1996), A. Wind (Fall 1998), G. Santin (REU 1998-99), M. McHale (Summer 2002), R. Mclaughin (REU 1999), S. Wood (REU 1999-00), F. Giarratani (from U. Toronto, REU, Summers 2000 & 2002), A. M. Krayvo (Summer 2000), J. N Krau (REU, 2000), J. Beaver (REU, 2000-01), R. Taylor (Summer 2001), M. Shore (Fall 2001), M. Schill (Spring 2002), S. Chandra (REU, 2003), N. Morsillo (REU, 2004-05), A. Zana (REU, 2005), A. Bentsionov (REU 2005), W. Goodman (REU, 2005), A. Connors (REU, Fall 2007, Spring 2008), D. Oliphant (REU, Spring & Summer 2010), K. Daniluk (Spring & Summer 2010)

Mentoring Activities:

Kenneth P. Dietrich School of Arts & Sciences Honors College Advisory Board, 2014-2016

IEEE ICDE PhD Symposium, Apr 2014

NSF/ICDE Mentor, April 2012: Entong Shen (NCSU), Yuchen Zhao (UIC)

TEACHING EXPERIENCE

Graduate Courses

Principles of Database Systems (CS2550), Spring '92, '94, '98, '10 -'15 / Fall '96, '00, '02, '08

Transaction-Oriented Computing (CS2555), Spring '95

PhD Seminars (CS3110, CS3550, CS3551):

- Mobile Computing, Spring '97, '01, '04
- Internet Middleware, Fall '00
- Network-Centric Data Base Servers, Spring '99
- Advances in Management of Data, Fall '92
- Data in Crisis Management, Fall '05
- Data Stream Management Systems, Fall '08
- Data Management on the Cloud, Fall '10
- In-Memory Data In-Memory Distributed Data Processing, Fall '15

Topics in Computer Science: Series of Short Courses (CS2001)

- Advanced Database Applications, Spring '92
- Reliable Distributed Systems, Spring '93, '94
- E-Commerce Data Management Technology, Fall '00, '01
- Mobile and Pervasive Data Management, Fall '02, '03
- Streams and Sensor Databases, Fall '04
- Data in Crisis Management, Fall '09
- Stream Data Management, Fall '11
- Big Data, Fall '13
- Processing of Aggregated Continuous Queries, Fall '15
- Processing of Aggregated Continuous Queries, Fall '16

Undergraduate Courses

Programming in C and Introduction to UNIX (CS0132), Every Fall 1992–97 / Spring '93

Database Management Systems (CS1555), Spring '92–'99, '02–'06, '08–'09, '11–'13, '15 / Summer '98 / Fall '05, '07–'08, '11–'13, '16

Introduction to Computer Graphics (CS1566), Fall '01, '02

Data Structures in Pascal (UMass, COINS287, TA), Spring '84 – Spring '85

Problem Solving using Pascal (UMass, ECE103, Designed the Labs), Summer '84

Introduction to Computers and Basic language (UMass, COINS105), Fall '83

PROFESSIONAL ACTIVITIES

Editor

IEEE Transactions on Data and Knowledge Engineering (**TKDE**) (Editorial Board, 2012-)
Distributed and Parallel Databases (**DAPD**) (Editorial Board, 2011-)
The Int'l Journal of Next-Generation Computing (**IJNGC**) (Editorial Board, 2011-)
VLDB Journal (**VLDBJ**) (Editorial Board, 2001-2007)
Encyclopedia of Database Systems, Springer – (1st edition, 2007-2010) (2nd edition, 2013-2015
(Major Area Editor for the “Extended transaction models (III.c)”)
Int'l Journal of Internet Technology and Secured Transactions (Editorial Board, 2005-)

Guest Editor

ACM Wireless Networks, Special Issue on Pervasive Computing and Communicatios, 10(6),
Nov. 2004 (with E. Pitoura, Co-Editor)
ACM Mobile Networks, Special Issue on Mobility in Databases and Distributed Systems, 9(5),
Oct. 2004. (with A. Zaslavsky, Co-Editor)
ACM SIGMOBILE Mobile Computing and Communications Review (MC2R), Special Issue on
Mobile Data Management, 8(3), July 2004. (with S. Banerjee)
Distributed Systems Engineering Journal, Special Issue on Workflow Management Systems,
IEE/BCS, Dec. 1996

General Chair

14th Int'l Conference on Mobile Data Management, Jul. 2014.
1st Int'l Workshop on Collaborative Big Data (C-Big), Oct. 2012
11th Int'l Conference on Mobile Data Management, Jun. 2011.
6th Int'l Conference on Mobile Data Management, Jan. 2005.
3rd ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access, (in conjunction
with ACM Sigmobile) May 2003.

Program Chair/Co-Chair

34th IEEE Int'l Conference on Data Engineering (ICDE'18), 2018.
10th Int'l Workshop on Enabling Real-Time Business Intelligence (BIRTE'16), 2016.
Int'l Workshop on Enabling Real-Time Business Intelligence (BIRTE'15), 2015.
29th IEEE Int'l Conference on Data Engineering (ICDE'13), PC Vice Chair (cloud infrastructure,
mobile, distributed, and peer-to-peer data management), 2013.
NSF Workshop on Sustainable Data Management (SEEDM), 2011
Int'l Conference on Extended Data Base Technologies (EDBT'11), PC Leader, 2011.
9th Int'l Conference on Ontologies, DataBases, and Applications of Semantics, 2010.
9th Hellenic Symposium on the Management of Data (HDMS'10), 2010.
NSF Workshop on Data Management for Mobile Sensors (MobiSensors), 2007.
5th ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access (MobiDE'06), 2006.
20th IEEE Int'l Conference on Data Engineering (ICDE'04), PC Vice Chair (Distributed, Parallel
and Mobile Databases), 2004.
4th Int'l Conference on Mobile Data Management (MDM'03), 2003.
4th Int'l DEXA Workshop on Mobility in Databases and Distributed Systems (MDDS'01), 2001.
2nd ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access (MobiDE'01), 2001.
3rd Int'l DEXA Workshop on Mobility in Databases and Distributed Systems (MDDS'00), 2000.

ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access (MobiDE'99), 1999.
2nd Int'l DEXA Workshop on Mobility in Databases and Distributed Systems (MDDS'99), 1999.
Information and Data Management Research in 21st Century. A workshop of the NSF Database and Expert Systems PIs (IDM'98), 1998.

Demonstration and Panel Chair/Co-Chair

IEEE Int'l Conference on Data Engineering – Panel Co-Chair (2014)
Int'l Conference on Very Large Data Bases – Panel Co-Chair (2012)
IEEE Int'l Conference on Data Engineering – Demo Chair (2003)

Program Committee Member

Conferences & Symposiums

Int'l Conference on Very Large Data Bases (2000, 2004, 2005, 2006, 2009, 2017)
ACM Sigmod Int'l Conference on the Management of Data (1999, 2002, 2008, 2010, 2011)
IEEE Int'l Conference on Data Engineering (1998-2001, 2005, 2006, 2010, 2011, 2015)
IEEE Int'l Conference on Mobile Data Management (2001, 2004, 2006, 2008, 2009, 2010, 2012)
Int'l Conference on Extended Data Base Technologies (2004, 2010, 2016)
ACM Int'l Conference on Information and Knowledge Management (2000, 2003, 2013)
IEEE Int'l Conference on Distributed Computing Systems (2005, 2016)
The 25th Australasian Database Conference (2014)
IEEE Int'l Conference on Pervasive Services (2005, 2006)
Int'l Conference on Advances in Social Networks Analysis and Mining (2009)
ACM Symposium on Applied Computing: Ubiquitous Computing Applications (2004)
Hellenic Symposium on the Management of Data (2002, 2003, 2004, 2006, 2009, 2014, 2016)
The 3rd Int'l Conference on Mobile and Ubiquitous Systems: Networks and Services (2006)
The 2nd Int'l Human.Society@Internet Conference (2003)
Int'l Conference on Database and Expert Systems Applications (2000, 2001, 2002, 2003)
9th IFIP 2.6 Working Conference on Database Semantics: E-Commerce (2001)
The Hellenic Conference on Informatics (1999, 2001, 2003)
Int'l Conference on the Management of Data (2000)
ADBIS-DASFAA Symposium on Advances in Databases and Information Systems (2000)
2nd Int'l Conference on Data Warehousing and Knowledge Discovery (2000)
The 33rd Hawaii Int'l Conference on System Sciences: International Electronic Commerce, (2000)
The 5th IEEE Mediterranean Conference on Control and Systems (1997)
Int'l Conference on Parallel and Distributed Computing Systems (1996, 1998)
The 5th Int'l Conference on Computer Communications and Networks (1996)
The 7th Int'l Conference on Software Engineering and Knowledge Engineering (1995)

Workshops

Int'l Workshop on Mobile Ubiquitous Systems, Infrastructures, Communications, and Applications (2016)
Int'l Workshop on Data Management for Sensor Networks (2004, 2005, 2010)
ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access (2010)
VLDB Workshop on Technologies for E-Services (2000, 2001)
1st Int'l Workshop on Pervasive Computing (2000)
International Workshop on Data Semantics in Web Information Systems (2001)
The 3rd Intl Workshop On Human Mobility Computing And Privacy (2015)
Int'l Workshop on E-Commerce and Web-based Information Systems (2001)
IEEE Int'l Workshop on Research Issues on Data Engineering (1996, 1999)

NSF Workshop on Integrated Spatial Databases: Digital Images and GIS (1999)
The 1st Int'l DEXA Workshop on Mobility in Databases and Distributed Systems (1998)

PhD Forums / Symposiums

IEEE Int'l Conference on Mobile Data Management / PhD Forum (2015)
IEEE Int'l Conference on Data Engineering / PhD Symposium (2014)

Session Chair

Int'l Conference on Very Large Data Bases (2016)
VLDB Int'l Workshop on Enabling Real-Time Business Intelligence (2016)
IEEE Int'l Conference on Data Engineering (2016)
Int'l Conference on Extended Data Base Technologies (2016)
Int'l Conference on Collaborative Computing (2014)
Hellenic Data Management Symposium (2014)
ACM Int'l Workshop on Data Engineering for Wireless and Mobile Access (2010)
Int'l Conference on Intelligent Systems and Computing: Theory and Applications (2006)
Int'l Conference on Mobile Data Management (2006)
NSF Workshop on Context-Aware Data Management (2002)
ACM Sigmod Int'l Conference on the Management of Data (1999, 2001)
Workshop on E-Commerce and Web Information Systems (2001)
IEEE Int'l Conference on Data Engineering (1999, 2000)
IEEE Int'l Workshop on Research Issues on Data Engineering (1996, 1999)
Int'l DEXA Workshop on Mobility in Databases and Distributed Systems (1998)
Int'l Conference on Parallel and Distributed Computing Systems (1992, 1996)
NECUSE Forum on Parallel Computing Curricula (1995)

Steering Committee Member

IEEE Workshop on Self-Managing Databases (2012-) IEEE Int'l Conference on Mobile Data Management (2006-)
ACM Int'l workshop on Data Engineering for Wireless and Mobile Access (2006-2013)
Int'l Workshop on Data Management for Sensor Networks (2004-2006)
NSF Workshop on Context-Aware Data Management (2002)
Int'l DEXA Workshop on Mobility in Databases and Distributed Systems (2002-2005)
Information and Data Management Research in 21st Century. A workshop of the NSF IIS-IDM PIs (1999, 2001)

Conference Organization

18th IEEE Int'l Conference on Data Engineering – Publicity Chair (2002)
7th Int'l Conference on Software Engineering and Knowledge Engineering – Publicity Chair (1995)

Association Memberships & Officer

ACM (Association for Computing Machinery) (since 1983)
IEEE (Institute of Electrical and Electronics Engineers) (since 1980)
Vice President Special Interest Group on Self-Management Database Systems (since 2012)
Sigma Xi, The Scientific Research Society, U.S.A. (1986-2000)
Hellenic Society of Computer and Information Scientists (since 1986)
Hellenic Scientist Association of Boston (1984–1991)
USENIX Association – University Liaison at Pitt.(1996-2012)

Referee and Reviewer

Proposals and Books

National Science Foundation (IIS/IDM, ITR, STI) 1993-present
Swiss National Science Foundation, 2016
General Secretariat for Research and Technology of Greece
Fundamentals of Database Systems, Elmasri & Navathe, 2nd Edition
Morgan Kaufmann (Advanced Database Topics)
Kluwer Academic Publishers (Mobile Computing)

Journals

ACM Transactions on Database Systems
IEEE Transactions on Knowledge and Data Engineering
IEEE Transactions on Parallel and Distributed Systems
IEEE Transactions on Computers
IEEE Transactions on Mobile Computing
ACM-BALTZER Mobile Networks and Applications
ACM-BALTZER Wireless Networks
Distributed and Parallel Databases Journal
Parallel Computing Journal
VLDB Journal
The Journal of Cooperative Informarion Systems
The Journal of Real-Time Systems
The Journal of Software Engineering and Knowledge Engineering
The Journal of Systems and Software

Conferences & Workshops

VLDB 2008
ADBIS 2005
ACM PODS Symposium (1997)
ACM SIGMOD Conference (1987, 1992, 1995)
Int'l Conference on Data Engineering (1989, 1992, 1998)
Int'l Conference on Parallel and Distributed Computing Systems (1992,1995,1996)
Int'l Conference on Parallel and Distributed Information Systems (1992)
IEEE INFOCOM (1991, 2000)
Int'l Conference on Distributed Computing Systems (1987, 1989)
Workshop on Experiences with Distributed and Multiprocessor Systems (1989)
Real Time System Symposium (1986, 2005)

ADMINISTRATIVE ACTIVITIES

Chair of CSD Web Site & Public Relations (2008-2015)
Graduate Evaluation, Assignment & Training Committee: (2014-2015)
Director of Graduate Studies (2007-2008, 2013-2014)
Chair of CSD Admissions, Awards and Financial Aid (2000-2005, 2013-2014)
Chair of CSD Admissions and Financial Aid (2007-2008)
Chair of CSD Database System (1997-2006)
CSD Outreach Committee (2000-2006)

CSD Graduate Admissions and Financial Aid Committee (1992-1996, 2005-2006)
CSD Graduate Programs and Exams Committee (1991-1999, 2000-2004)
CSD New Building Moving Committee (2001-2002)
CSD Faculty Search Committee (1997-1999)
CSD Undergraduate Program Committee (1996-1997)
NASA/MTAC Review Board, University of Pittsburgh (1992-1993)
CSD Chair Review Committee (1995-1996)
Art & Science Tenure Council (2000-)
School of Information Science Tenure Council (2003)
University Electronic Course Reserves Advisory Group (ULS) (1994-1996)
Electrical Engineering PhD Prelim Exam Committee (Fall 1993, 1994)
Curriculum Committee, Pitt-CMU Computational Biology PhD Program (2005-)
Senate Budget Policies Committee (2016-2019)