1. UGUR CETİNTEMEL

Associate Professor, Computer Science, Brown University

2. EDUCATION

8/90-6/94	**B.S.** (Computer Science) Bilkent University, Ankara, Turkey.
6/94-6/96	**M.S.** (Computer Science) Bilkent University, Ankara, Turkey.
8/96-9/01	**Ph.D.** (Computer Science) University of Maryland, College Park, MD, USA.

3. PROFESSIONAL APPOINTMENTS

6/94-6/96	**Research Assistant**, Bilkent University, Ankara, Turkey.
6/98-9/98	**Summer Intern**, Bell Laboratories, Lucent Technologies Inc., Murray Hill, NJ.
6/97-9/01	**Research and Teaching Assistant**, University of Maryland, College Park, MD.
9/01-6/06	**Assistant Professor**, Brown University, Computer Science Dept., Providence, RI.
9/03-present	**Senior Architect, Co-founder**, StreamBase Systems Inc., MA
6/06-6/07	**Manning Assistant Professor**, Brown University, Providence, RI.
6/07-present	**Associate Professor**, Brown University, Computer Science Dept., Providence, RI.

4. COMPLETED PUBLICATIONS

a. Refereed Journal Articles:

- **U. Çetintemel**, J. Zimmermann, Ö. Ulusoy, and A. Buchmann. OBJECTIVE: A Benchmark for Object-Oriented Active Database Management Systems. In Journal of Systems and Software, 45(1), pages 31-43, 1999.

- P. J. Keleher and **U. Çetintemel**. Consistency Management in Deno. In ACM-Baltzer Journal on Special Topics in Mobile Networking and Applications (MONET), 5(4), pages 299-309, 2000.

- **U. Çetintemel** and P. J. Keleher. Light-Weight Currency Management Mechanisms in Mobile and Weakly-Connected Environments. Journal of Distributed and Parallel Databases, 11(1), pages 53-71, January 2002.

- **U. Çetintemel**, P. J. Keleher, B. Bhattacharjee, and M. J. Franklin. Deno: A Decentralized, Peer-to-Peer Object-Replication System for Weakly-Connected Environments. IEEE Transactions on Computers (TOCS), 52(7), pages 943-959, July 2003.

- D. Carney, **U. Çetintemel**, M. Cherniack, C. Convey, S. Lee, G. Seidman, M. Stonebraker, N. Tatbul, S. Zdonik. Aurora: A New Model and Architecture for Data Stream Management. Very Large Data Bases Journal, August 2003.

- H. Balakrishnan, M. Balazinska, D. Carney, **U. Çetintemel**, M. Cherniack, C. Convey, E. Galvez, J. Salz, M. Stonebraker, N. Tatbul, R. Tibbets, S. Zdonik. Retrospective on Aurora. Very Large Databases Journal, 13(4), pages 370-383, December 2004.

- M. Akdere, C. Bilgin, O. Gerdaneri, I. Korpeoglu, O. Ulusoy, **U. Çetintemel**. A Comparison of Epidemic Algorithms in Wireless Sensor Networks. Computer Communications Journal, Special Issue on Wireless Sensor Networks", 29, pages 13-14, August 2006.

b. Non-Refereed Journal Articles:

- **U. Çetintemel**. On the Academic Interview Circuit: An End-to-End Discussion. In SIGMOD Record, 30(4), pages 116-122, December 2001.

- S. Zdonik, M. Stonebraker, M. Cherniack, **U. Çetintemel**, M. Balazinska, and H. Balakrishnan. The Aurora and Medusa Projects. Bulletin of the Technical Committee on Data Engineering, IEEE Computer Society, 26(1), pages 3-10, March 2003.

- Y. Ahmad, **U. Çetintemel**, J. Jannotti, A. Zgolinski, and S. Zdonik. Network Awareness in Internet-Scale Stream Processing. Bulletin of the Technical Committee on Data Engineering, 28(1), IEEE Computer Society, pages 63-70, March 2005.
- M Stonebraker, **U. Çetintemel,** and S. Zdonik. The 8 Rules of Real-Time Stream Processing. ACM SIGMOD Record, 34(4), pages 42-47, December 2005.
- M. Akdere, **U. Çetintemel,** D. Crispell, J. Jannotti, J. Mao, G. Taubin. Data-Centric Visual Sensor Networks for 3D Sensing. In Lecture Notes in Computer Science, 2007.

c. Refereed Conference Articles:

- **U. Çetintemel,** A. Cinar, G. Tunali, and O. Ulusoy. A Performance Model for Client-Server Database Management Systems. In Proceedings of the 9th International Symposium on Computer and Information Sciences, pages 81-88, November 1994.
- A. Pinar and **U. Çetintemel.** Wide-Area Selective Information Dissemination. In Proceedings of the 10th International Symposium on Computer and Information Sciences, pages 281-288, November 1995.
- **U. Çetintemel**, M. J. Franklin, and C. Lee Giles. Self-Adaptive User Profiles for Large-Scale Data Delivery. In proceedings of the 16th IEEE International Conference on Data Engineering (ICDE'00), San Diego, CA, March 2000.
- **U. Çetintemel** and P. J. Keleher. Performance of Mobile, Single-Object Replication Protocols. In proceedings of the 19th IEEE Symposium on Reliable Distributed Systems (SRDS'00), Nurnberg, Germany, October 2000.
- **U. Çetintemel**, P. J. Keleher, and M. J. Franklin. Support for Speculative Update Propagation and Mobility in Deno. In proceedings of the 21th IEEE International Conference on Distributed Computing Systems (ICDCS'01), Phoenix, Arizona, April 2001 (**Best Paper Runner-up**).
- **U. Çetintemel**, B. Özden, M. Franklin, and A. Silberschatz. Design and Evaluation of Redistribution Strategies for Wide-Area Commodity Distribution. In proceedings of the 21th IEEE International Conference on Distributed Computing Systems (ICDCS'01), Phoenix, Arizona, April 2001.
- **U. Çetintemel**, P. J. Keleher, and Y. Ahmad. Exploiting Precision vs. Efficiency Tradeoffs in Symmetric Replication Environments (short paper). In proceedings of the 21st ACM Symposium on Principles of Distributed Computing (PODC'02), Monterey, CA, USA, July 2002.
- D. Carney, **U. Çetintemel**, M. Cherniack, C. Convey, S. Lee, G. Seidman, M. Stonebraker, N. Tatbul, and S. Zdonik. Monitoring Streams: A New Class of Data Management Applications. In proceedings of the 28th International Conference on Very Large Data Bases (VLDB'02), Hong Kong, China, August 2002.
- **U. Çetintemel** and P. J. Keleher. Efficient Distributed Precision Control for Symmetric Replication Environments. In proceedings of the 21st IEEE Symposium on Reliable Distributed Systems (SRDS'02), Suita, Japan, October 2002.
- M. Cherniack, H. Balakrishnan, M. Balazinska, D. Carney, **U. Çetintemel**, Y. Xing, S. Zdonik. Scalable Distributed Stream Processing. In proceedings of the First Biennial Conference on Innovative Database Systems (CIDR'03), Asilomar, CA, USA, January 2003.
- D. Abadi, D. Carney, **U. Çetintemel**, M. Cherniack, C. Convey, C. Erwin, E. Galvez, M. Hatoun, J. Hwang, A. Maskey, A. Rasin, A. Singer, M. Stonebraker, N. Tatbul, Y. Xing, R.Yan, S. Zdonik. Aurora: A Data Stream Management System (Demo Description). In proceedings of the ACM Sigmod International Conference on Management of Data, San Diego, CA, June 2003.
- N. Tatbul, **U. Çetintemel,** S. Zdonik, M. Cherniack, M. Stonebraker. Load Shedding in a Data Stream Manager. In proceedings of the 29th International Conference on Very Large Data Bases (VLDB'03), Berlin, Germany, September 2003.
- D. Carney, **U. Çetintemel,** A. Rasin, S. Zdonik, M. Cherniack, M. Stonebraker. Operator Scheduling in a Data Stream Manager. In proceedings of the 29th International Conference on Very Large Data Bases (VLDB'03), Berlin, Germany, September 2003.
- Y. Ahmad and **U. Çetintemel**. Network-Aware Query Processing for Stream-based Applications. In proc. of the 30th International Conference on Very Large Data Bases (VLDB'04), Toronto, Canada, September 2004.

- D. Abadi, Y. Ahmad, H. Balakrishnan, M. Balazinska, **U. Çetintemel**, M. Cherniack, Y. Xing, N. Tatbul, S. Zdonik. The Design of the Borealis Stream Processing Engine. In proceedings of the First Biennial Conference on Innovative Database Systems (CIDR'05), Asilomar, CA, USA, January 2005.

- O. Papaemmanouil and **U. Çetintemel**. SemCast: Semantic Multicast for Content-based Stream Dissemination. In proceedings of the 21th IEEE International Conference on Data Engineering (ICDE'05), Tokyo, Japan, April 2005.

- J. Hwang, M. Balazinska, A. Rasin, **U. Çetintemel**, M. Stonebraker, S. Zdonik. High-Availability Algorithms for Distributed Stream Processing. In proceedings of the 21th IEEE International Conference on Data Engineering (ICDE'05), Tokyo, Japan, April 2005.

- Y. Ahmad, B. Berg, **U. Çetintemel**, M. Humphrey, J. Hwang, A. Jhingran, A. Maskey, O. Papaemmanouil, A. Rasin. N. Tatbul, W. Xing, Y. Xing, S. Zdonik. Distributed Operation in the Borealis Stream Processing Engine (Demonstration). ACM Sigmod International Conference on Management of Data (SIGMOD'05), Baltimore, MD, June 2005 (**Best Demonstration Paper Award**).

- O. Papaemmanouil, Y. Ahmad, **U. Çetintemel**, J. Jannotti, Y. Yildirim, Extensible Optimization in Overlay Dissemination Trees. In Proceedings of the 25th ACM Sigmod International Conference on Management of Data (SIGMOD'06), Chicago, June 2006.

- O. Papaemmanouil, Y. Ahmad, **U. Çetintemel**, J. Jannotti, Y. Yildirim, XPORT: Extensible Profile-driven Overlay Routing Trees (Demonstration). In Proceedings of the 25th ACM Sigmod International Conference on Management of Data (SIGMOD'06), Chicago, June 2006.

- Y. Xing, J. Hwang, **U. Çetintemel**, S. Zdonik. Providing Resiliency to Load Variations in Distributed Stream Processing. In proceedings of the 32nd International Conference on Very Large Databases (VLDB'06), Seoul, Korea, September 2006.

- M. Akdere, **U. Çetintemel,** D. Crispell, J. Jannotti, J. Mao, G. Taubin. Data-Centric Visual Sensor Networks for 3D Sensing. In Proceedings of the 2nd International Conference on Geosensor Networks, (GeoSensor'06), Boston, MA, October 2006.

- J. Hwang, Y. Xing, **U. Çetintemel**, S. Zdonik. A Cooperative, Self-Configuring High-Availability Solution for Stream Processing. In proceedings of the 23th IEEE International Conference on Data Engineering (ICDE'07), Istanbul, Turkey, April 2007.

- M. Stonebraker. C. Bear, **U. Çetintemel**, M. Cherniack, T. Ge, N. Hachem, S. Harizopoulos, J. Lifter, J. Rogers, S. Zdonik One Size Fits All? Part 2: Benchmarking Studies. In proceedings of the third Biennial Conference on Innovative Database Systems (CIDR'07), Asilomar, CA, USA, January 2007.

- N. Tatbul, **U. Çetintemel**, S. Zdonik. Staying Fit: Efficient Load Shedding Techniques for Distributed Stream Processing. In proceedings of the 33rd International Conference on Very Large Databases (VLDB'07), Vienna, Austria, September 2007.

- J. Hwang, **U. Çetintemel**, S. Zdonik. Fast and Highly-Available Stream Processing over Wide-Area Networks. In proceedings of the 24th IEEE International Conference on Data Engineering (ICDE'08), Cancun, Mexico, April 2008.

- Y. Ahmad, O. Papaemmanouil, **U. Çetintemel**, J. Rogers. Simultaneous Equation Systems for Query Processing on Continuous-Time Data Streams. In proceedings of the 24th IEEE International Conference on Data Engineering (ICDE'08), Cancun, Mexico, April 2008.

- Borealis-R: A Replication-Transparent Stream Processing System for Wide-Area Monitoring Applications (demo). J. Hwang, S. Cha, **U. Çetintemel**, S. Zdonik. In ACM International Conference on Management of Data (SIGMOD'08), Vancouver, Canada, June 2008.

- M. Akdere, **U. Çetintemel,** N. Tatbul. Plan-based Complex Event Detection across Distributed Sources. In proceedings of the International Conference on Very Large Databases (VLDB'08), Oakland, New Zealand, September 2008.

- N. Jain, S. Mishra, A. Srinivasan, J. Gehrke, J. Widom, H. Balakrishnan, **U. Çetintemel**, M. Cherniack, R. Tibbetts, S. Zdonik. Towards a Streaming SQL Standard. In proceedings of the International Conference on Very Large Databases (VLDB'08), Oakland, New Zealand, September 2008.

- J. Mao, J. Jannotti, M. Akdere, **U. Çetintemel**. Event-based Constraints for Sensornet Programming In proceedings of the 2nd International Conference on Distributed Event-based Systems (DEBS'08), Rome, Italy, July 2008.

- O. Papaemmanouil, **U. Çetintemel**, J. Jannotti. Supporting Generic Cost-Models for Wide-Area Stream Processing. In proceedings of the 25th IEEE International Conference on Data Engineering (ICDE'09), China, April 2009.

- M. Akdere, **U. Çetintemel,** E. Upfal. Database Support for Continuous Prediction Queries over Streaming Data. In Proceedings of the International Conference on Very Large Databases (PVLDB), Volume 3(1), 1291-1301, 2010.

- M. Akdere, **U. Çetintemel**, M. Riandato, E. Upfal, S. Zdonik. The Case for Predictive Database Systems: Challenges and Opportunities. In the 5th International Conference on Innovative Database Research (CIDR'11), January 2011.

- M. Riandato, M. Akdere, **U. Çetintemel**, E. Upfal, S. Zdonik The VC-Dimension of SQL Queries and Selectivity Estimation through Sampling. In The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD'11), September 2011.

- J. Duggan, **U. Çetintemel,** O. Papaemmanouil, E. Upfal. Modeling and Prediction of Concurrent Query Performance. In the International ACM Conference on Management of Data (SIGMOD'11), June 2011.

- M. Akdere, **U. Çetintemel**, M. Riandato, E. Upfal, S. Zdonik. Learning-based Query Performance Prediction. In the 27th International Conference on Data Engineering (ICDE'12), April 2012.

d. Refereed Workshop Articles:

- **U. Çetintemel**, B.T. Jonsson, Michael J. Franklin, C. Lee Giles, and D. Srivastava. Evaluating Answer Quality/Efficiency Tradeoffs. In proceedings of the 5th International Workshop on Knowledge Representation and Databases (KRDB 98), Seattle, WA, May 1998.

- **U. Çetintemel** and P. J. Keleher. Light-Weight Currency Management Mechanisms in Deno**.** In proceedings of the 10th IEEE Workshop on Research Issues in Data Engineering (RIDE 2000) on "Middleware for Mobile Business Applications and E-Commerce", San Diego, CA, March 2000 (**Best Paper Award**).

- D. Carney, **U. Çetintemel,** A. Rasin, S. Zdonik, M. Cherniack, and M. Stonebraker. Reducing execution overhead in a data stream manager. In proceedings of the 1st Workshop on Management and Processing of Data Streams (MPDS'03), San Diego, CA, June 2003.

- N. Tatbul, **U. Çetintemel**, S. Zdonik, M. Cherniack, M. Stonebraker, Load Shedding on Data Streams. In proceedings of the ACM Workshop on Management and Processing of Data Streams (MPDS'03), San Diego, CA, June 2003.

- **U. Çetintemel**, A. Flinders, and Y. Sun. Power-Aware Data Dissemination in Wireless Sensor Networks. In proceedings of the 3rd ACM International Workshop on Data Engineering for Wireless and Mobile Access (MobiDE'03), September 2003.

- O. Papaemmanouil and **U. Çetintemel**. Semantic Multicast for Content-based Stream Dissemination. In proc. of the 7th International Workshop on the Web and Databases (WebDB'04), Paris, France, June 2004.

- Y. Ahmad, **U. Çetintemel,** J. Jannotti, and A. Zgolinski. Locality-Aware Networked Join Evaluation. In proc. of the International Workshop on Networking meets Databases (NetDB'05), Tokyo, Japan, April 2005.

- JeHyok Ryu, **U. Çetintemel**. Applying the Effective Distance Metric to Location-Dependent Querying. In proc. of the 1st International Workshop on Pervasive Computing, Montpellier, France, October 2006.

- J. Hwang, **U. Çetintemel**, and S. Zdonik. Fast and Reliable Stream Processing over Wide Area Networks. In Proceedings of the 1st IEEE International Workshop on Scalable Stream Processing Systems (SSPS'07) Istanbul, Turkey, April 2007.

- Y. Ahmad and **U. Çetintemel**. Declarative Temporal Models for Sensor-Driven Query Processing. In proc. of the International Workshop on Data Management for Sensor Networks (DMSN'07), Vienna, Austria, September 2007.

- J. Rogers, O. Papaemmanouil, and **U. Çetintemel**. A Generic Auto-Provisioning Framework for Cloud Databases. In proc. of the 5th International Workshop on Self Managing Database Systems (SMDB'10), Los Angeles, USA, March 2010.

e. Book Chapters:

- **U. Çetintemel**, Daniel Abadi, Yanif Ahmad, Hari Balakrishnan, Magdalena Balazinska, Mitch Cherniack, Jeong-Hyon Hwang, Wolfgang Lindner, Samuel Madden, Anurag Maskey, Alexander Rasin, Esther Ryvkina, Mike Stonebraker, Nesime Tatbul, Ying Xing, and Stan Zdonik. The Aurora and Borealis Stream Processing Engines. (in print)

f. Invited Articles:

- D. Aksoy, M. Altinel, R. Bose, **U. Çetintemel**, M. J. Franklin, Jane Wang, and S. Zdonik. Research in Data Broadcast and Dissemination. In Proceedings of the First International Conference on Advanced Multimedia Content Processing (AMCP 98), Osaka, Japan, November 1998.

- M. Stonebraker and **U. Çetintemel**. One Size Fits All: An Idea Whose Time has Come and Gone. In proceedings of the 21th IEEE International Conference on Data Engineering (ICDE'05), Tokyo, Japan, April 2005.

- **U. Çetintemel**. Software Processes Streams in Real Time. NetworkWorld Online. April, 2005.

- O. Papaemmanouil, Y. Ahmad, **U. Çetintemel,** and J. Jannotti. Application-Aware Overlay Networks for Data Dissemination. In proceedings of the International Workshop on Semantics enabled Networks and Services (ICDE SeNS 2006).

- Y. Ahmad and **U. Çetintemel**. Stream Data Management: Streaming Applications**.** Definitional entry in the Encyclopedia of Database Systems, Springer, 2009.

- Y. Ahmad and **U. Çetintemel**. Stream Data Management: Architectures and Prototypes**.** Essay in the Encyclopedia of Database Systems, Springer, 2009.

g. Under Submission

- M. Akdere, **U. Çetintemel**. Continuous Probabilistic Data Association with Constraints. Brown TR-CS-11-02.

- N. Backman, K. Pattabiraman, **U. Çetintemel**. A Continous MapReduce Processing Model for Low-Latency Stream Processing on Multi-Core Architectures. Brown TR-CS-10-01.

5 .   R E S E A R C H   G R A N T S

a. Current:

- **National Science Foundation**, Automatic Incremental Design for Next-Generation Database Systems, Co-PI, (with S. Zdonik), $500K, September 2009 – September 2012.

- **National Science Foundation**, Longview: Querying the Future Now, **PI**, (with E. Upfal and S. Zdonik), $1.2M, September 2009 – September 2012.

- **National Science Foundation,** SciDB - An Array Oriented Data Management System for Massive Scale Scientific Data, Co-PI (with S. Zdonik), $736K, September 2011-September 2014.

b. Pending:

c. Completed:

- **National Science Foundation**, NeTS-NoSS: Sensing in Three Dimensions with Smart Cameras, **Co-PI**, (with J. Jannotti and G. Taubin), $700K, September 2007 – September 2011.

- **National Science Foundation**, CAREER: Infrastructures for Sensor-based Data-Centric Monitoring Applications, **PI**, $500K, June 2005– December 2011.

- **National Science Foundation**, Aurora: Enabling Stream-based Monitoring Applications, ITR Grant, **PI**, (with S. Zdonik and E. Upfal), $1.8M, September 2003 – September 2009.

- **NVIDIA,** Data-Parallel Query Processing with Many-Core Processors, Hardware Donation (worth

~$10K), 2008-2009.

- **MITRE Corporation (MIT subcontract)**, A Sensor Data and Analysis Framework, **PI**, $45K, November 2005 – November 2006.
- **National Science Foundation,** The Brown Internet Computing Lab, Research Infrastructure Grant, **Co-PI**, (Steven P. Reiss, PI), September 2003 – September 2005.
- **Brown University**, **Richard B. Salomon Research Award**, A new Architecture and Model for Tasking Wireless Sensor-Actuator Networks, **PI** (with J. Jannotti), $24K, December 2004 – December 2005.
- **Army Medical Research and Material Command (AMRM)**, Monitoring and Mining Data Streams, **Co-PI** (S. Zdonik, PI), $472, 871, August 2002-August 2005.
- **Microsoft Research**, Data Dissemination in Wireless Ad Hoc Networks, **PI**, $8,500, September 2002.

6 .   S E R V I C E

a. University Service

2006

- Arnold Fellowship Award Committee member
- Baker and Emery Fellowship Award Committee member

2007

- Goldwater Scholarship Committee member

2008

- First-year Academic Advisor
- Goldwater Scholarship Committee member

2009

- First-year Academic Advisor
- Goldwater Scholarship Committee member

2010

- Goldwater Scholarship Committee member

2011

- Goldwater Scholarship Committee member
- Computer Engineering (architecture subgroup) External Search Committee member
- OSP-Faculty Committee Member

b. Departmental Service

2001

- ACM Collegiate Programming Contest Brown team coach

2002

- Computing Committee member
- Web Committee member
- Departmental Programming Comps Committee member
- Departmental Graduate Recruiting Committee member
- ACM Collegiate Programming Contest Brown team coach

2003

- Organized and hosted the departmental Industrial Partners Program (IPP) Symposium on "Pervasive Computing: Middleware and Technologies"

- Faculty Search Committee member
- Graduate Examinations Committee member
- Computing Committee member
- Web Committee member
- ACM Collegiate Programming Contest Brown team coach

2004
- Graduate Admissions Committee member
- Graduate Examinations Committee member
- Computing Committee member
- ACM Collegiate Programming Contest Brown team coach

2005
- Graduate Admissions Committee member
- Graduate Examinations Committee member
- Computing Committee member
- ACM Collegiate Programming Contest Brown team coach

2006
- Graduate Recruiting Committee member
- Graduate Admissions Committee member
- Graduate Examinations Committee member

2007
- Graduate Recruiting Committee chair
- IPP Co-Director
- Graduate Admissions Committee member
- Graduate Examinations Committee member
- Faculty Search Committee member
- Administrative Computing Committee member

2008
- IPP Director
- Graduate Examinations Committee member

2009
- IPP Director
- Graduate Examinations Committee member

2010
- IPP Director
- Lecture Series Committee member

2011
- IPP Director
- Lecture Series Committee chair

c. Professional and Community Service:

2002
- *Publicity Chair*:
  The 2002 International Symposium on Distributed Objects and Applications (DOA), October 2002
  The 2002 International Conference on Ontologies, Databases, and Applications of Semantics

(ODBASE), October 2002

The 2002 International Conference on Cooperative Information Systems (CoopIS), October 2002

- *Program Committee Member*:

    The 11th International Conference on Information and Knowledge Management (CIKM), Nov 2002

2003

- *NSF IIS/IDM Panel Member*

- *Finance Chair*:

    The 2003 Workshop on Internet Applications (WIAPP), June 2003

- *Program Committee Member*

    The 23rd International Conference on Distributed Computing Systems (ICDCS'03), May 2003

    The 2003 International Symposium on Applications and the Internet (SAINT'03), June 2003

    The 3rd ACM International Workshop on Data Engineering for Wireless and Mobile Access (MobiDE), June 2003

2004

- *Demo Program Chair*:

    The 20th IEEE International Conference on Data Engineering (ICDE), April 2004

- *Program Committee Member*:

    The 2004 International Conference on Management of Data (SIGMOD), June 2004

    The 20th IEEE International Conference on Data Engineering (ICDE), April 2004

    The 2004 IEEE International Conference on Web Services (ICWS), July 2004

    The 4th International Workshop on Distributed Event-Based Systems (DEBS), May 2004

    The 1st International Workshop on Data Management for Sensor Networks (DMSN), August 2004

    The 19th International Symposium on Computer and Information Sciences (ISCIS), Oct 2004

2005

- *ACM SIGMOD Record Associate Editor*

- *Program Committee Co-Chair*:

    The 4th International ACM Workshop on Data Engineering for Wireless and Mobile Data Access (MobiDE), June 2005

- *Program Committee Member*:

    The 31st International Conference on Very Large Databases (VLDB), September 2005

    The 21st IEEE International Conference on Data Engineering (ICDE), April 2005

    The 1st International Conference on Collaborative Computing (ICCC), December, 2005

    The 1st International Workshop on Networking meets Databases (NetDB), April 2005

    The 2nd International Workshop on Data Management for Sensor Networks (DMSN), Sep 2005

    The VLDB 2005 PhD Workshop, September 2005

2006

- *ACM SIGMOD Record Associate Editor*

- *Program Committee Co-Chair*:

    The 2nd IEEE International Workshop on Networking Meets Databases (NetDB), March 2006

- *Program Committee Member*

    The 2006 International Conference on Management of Data (SIGMOD), June 2006

    The 26th International Conference on Distributed Computing Systems (ICDCS), July 2006

    The 22nd IEEE International Conference on Data Engineering (ICDE), April 2006

    The 1st International Conference on Semantics of a Networked World (ICSNW), March 2006

    The 7th International Conference on Mobile Data Management (MDM), May 2006

    The 2nd International Conference on Geosensor Networks (GSN), October 2006

    The 21st International Symposium on Computer and Information Sciences (ISCIS), November 2006

    The 5th International Workshop on Data Engineering and Wireless Access (MobiDE), June 2006

The 3rd International Workshop on Data Management for Sensor Networks (DMSN), Sep 2006
The 1st International Workshop on Mobile Location-Aware Sensor Networks (MLASN), May 2006
The 1st International workshop on Middleware for Sensor Networks (MidSens), November 2006

2007

- *ACM SIGMOD Record Associate Editor*
- *IEEE ICDE 2008 Vice PC Chair* for "Data Streams"
- *EDS Area Editor "*Stream Data Management*"*
- *Industrial Liaison*:
  Third Biennial Conference on Innovative Database Systems Research (CIDR 2007)
- *Organizing Committee Vice-Chair*:
  First International NSF Workshop on Mobile Sensor Systems (MobiSens)
- *Steering Committee Member*:
  International ACM Workshop on Data Engineering for Wireless and Mobile Data Access (MobiDE)
  International IEEE Workshop on Networking Meets Databases (NetDB)
- *Program Committee Member*:
  The 33rd International Conference on Very Large Databases (VLDB), September 2007
  The 1st International Conference of Distributed Event-Based Systems (DEBS), June 2007.
  The 23 rd IEEE International Conference on Data Engineering (ICDE), March 2007
  The 2007 International Symposium on Applications and the Internet (SAINT), January 2007

2008

- *ACM SIGMOD Record Associate Editor*
- *NSF IIS/III Panel Member*
- *Steering Committee Member*:
  International ACM Workshop on Data Engineering for Wireless and Mobile Data Access (MobiDE)
  International IEEE Workshop on Networking Meets Databases (NetDB)
- *Program Committee Member*:
  The 2008 International Conference on Management of Data (SIGMOD), June 2008
  The 5rd International Workshop on Data Management for Sensor Networks (DMSN), Sep 2008

2009

- *General Co-Chair: ACM SIGMOD 2009*
- *Associate Editor:*
  VLDB Journal
  Distributed and Parallel Databases Journal
  ACM SIGMOD Record
- *Steering Committee Member*:
  International ACM Workshop on Data Engineering for Wireless and Mobile Data Access (MobiDE)
  International IEEE Workshop on Networking Meets Databases (NetDB)
- *Program Committee Member*:
  The 4th Biennial Conference on Innovative Database Systems (CIDR), January 2009
  The 35th International Conference on Very Large Databases (VLDB), September 2009
  The 25th IEEE International Conference on Data Engineering (ICDE), March 2009
  The 12th International Conference on Extending Database Technology (EDBT), March 2009
  The 8th International Conference on Information Processing in Sensor Networks (IPSN), April 2009
- *Panel Member:*
  NSF IIS/III

2010

- *Program Co-Chair: ACM DEBS 2010*
- *Associate Editor:*
  VLDB Journal
  Distributed and Parallel Databases Journal
  ACM SIGMOD Record
- *Steering Committee Member:*
  International ACM Workshop on Data Engineering for Wireless and Mobile Data Access (MobiDE)
  International IEEE Workshop on Networking Meets Databases (NetDB)
- *Program Committee Member:*
  The 36th International Conference on Very Large Databases (VLDB), September 2010
  The 11th International Conference on Mobile Data Management (MDM), May 2010
  The 1st ACM SIGSPATIAL International Workshop on GeoStreaming (IWGS), Nov 2010
  The 7th International Workshop on Data Management for Sensor Networks (DMSN), Sep 2010
- *Panel Member:*
  NSF IIS/III

2011
- *Program Co-Chair (Research Track): VLDB*
- *Program Area-Chair (Events and Streams): IEEE ICDE 2012*
- *Associate Editor:*
  VLDB Journal
  Distributed and Parallel Databases Journal
  ACM SIGMOD Record
- *Steering Committee Member:*
  International ACM Workshop on Data Engineering for Wireless and Mobile Data Access (MobiDE)
  International IEEE Workshop on Networking Meets Databases (NetDB)
- *Program Committee Member:*
  The 5th International Conference on Innovative Database Systems (CIDR), January 2011
  The 2011 International Conference on Management of Data (SIGMOD), June 2011
  The 12th International Conference on Mobile Data Management (MDM), May 2011
  The 5th International Workshop on Large Scale Distributed Systems and Middleware, (LADIS), September 2011
- *Panel Member:*
  NSF IIS/III

7. ACADEMIC HONORS, AWARDS, ETC.

- Full scholarship for undergraduate studies, Bilkent University, June 1990-1994
- Best senior thesis award, Department of Computer Engineering, Bilkent University, March 1994
- Scholarship for graduate studies, Bilkent University, June 1994-1996
- Fellowship for graduate studies, Turkish Science and Research Council (TUBITAK), June 1996-1998
- Best paper award, 10th IEEE Workshop on Research Issues in Data Engineering (RIDE 2000)
- IEEE Student Research Travel Award, March 2001

- Best paper award runner-up, 21th IEEE International Conference on Distributed Computing Systems (ICDCS'01), April 2001
- Nomination for Packard Fellowship for Science and Engineering, Brown University, April 2003
- ACM Service Award, June 2005
- Best demonstration paper award, ACM Conference on Management of Data (SIGMOD'05), June 2005
- Richard B. Salomon Research Award, Brown University, December 2004
- CAREER Award, National Science Foundation (NSF), June 2005
- Appointed Manning Assistant Professor, Brown University, June 2006

9. TEACHING AND ADVISING

a. Teaching

2002	CS 296-2. Pervasive Computing (11), CS 295-1. Topics in Distributed Databases (15)
2003	CS 138. Networked Information Systems, CS 295-11 (21). Topics in Distributed Databases (12)
2004	CS 138. Networked Information Systems, CS 295-1 (14). Sensor Data Management (16)
2005	CS 295-1. Sensor Data Management (14)
2006	CS 138. Networked Information Systems (17), CS 295-11. Topics in Distributed Databases (14)
2007	CS 18. An Integrated Introduction to Computer Science (37), CS 295-11. Topics in Distributed Databases (11)
2008	CS 18. An Integrated Introduction to Computer Science (28), CS 295-11. Topics in Distributed Databases (25)
2009	CS 18. An Integrated Introduction to Computer Science (50), CS 295-11. Topics in Distributed Databases (21)
2010	CS 295-11. Topics in Distributed Databases (18)
2011	CS 18. An Integrated Introduction to Computer Science (48); CS 295-11. Topics in Distributed Databases (16)

b. Advising: Research Supervision
Post-Doctoral:
Dr. Je-Hyok Ryu, 2005-2007
Doctoral:
Olga Papaemmanouil, 2002-2008
Yanif Ahmad, 2002-2009
Mert Akdere, 2005-2011
Nathan Backman, 2006-present
Jennie Rogers, 2006-present
Alex Kalinin, 2010-present

Masters:
Andrew Flinders, 2001-2002
Mark Ture, 2002-2003
George Kong, 2002-2003
Alex Zgolinski, 2003-2004
Bryant Ng, 2003-2004
Anjali Jhingran, 2005-2006

Austin Park, 2005-2006
Syung Youn Nam, 2005-2006
Kyu-Wook Cho, 2005-2006
Vince Liang, 2005-2006
Alptekin Kupcu, 2004-2007
Kaveh Boghraty, 2006-2007
Ha Tran, 2006-2007
Matt Fuller, 2006-2008
Zhenyuan Zhao, 2007-2008
Brandon Nardone, 2008-2009
Adam Conrad, 2008-2009
Onur Keskin, 2008-2010
DongboWang, 2008-2010
Wei Song, 2008-2010
Karthik Pattabiraman, 2008-2010
Zikai Wang, 2009-2011

Undergraduate:

Kate Ho, 2002-2003 (honors thesis)
Ryan Tierney, 2003-2004 (UTRA)
Luke Peng, 2003-2004
Redha Elminyawi, 2004-2005
Vesselin Arnaudov, 2004-2005 (honors thesis)
Jason Ye, 2004-2005 (honors thesis)
Daniel Winograd-Cort, 2006 (UTRA)
Patrick Taylor Ramsey, 2006 (UTRA)
Sanghoon Cha, 2005-2007
Ian Sherman, 2007 (UTRA)
Jocelyn Adams, 2007 (UTRA)
Robert Lee Giacomo Mustacchi, 2007
Adam Conrad, 2007
John Loeser, 2008
Samuel Pucci, 2008
Shaopeng Zhang, 2011
Ivan Yanev, 2011

d. Advising: PhD Committees

Don Carney, PhD 2005
Ying Xing, PhD 2006
Nesime Tatbul, PhD 2006
Tingjian Ge, PhD 2009
Song Wang (WPI), PhD 2008
Jeong-Hyon Hwang, PhD 2009
Alex Rasin, PhD 2010
Jie Mao, 2005-present
Andy Pavlo, 2007-present
Hideaki Kimura, 2008-present