

## CURRICULUM VITAE

### Subhash Suri

Department of Computer Science  
Engineering I, Room 2111  
University of California  
Santa Barbara, CA 93106

Tel: (805) 259-7581  
Fax: (805) 893-8553  
Email: [suri@cs.ucsb.edu](mailto:suri@cs.ucsb.edu)  
<http://www.cs.ucsb.edu/~suri/>

#### Education

- The Johns Hopkins University, Ph. D. (Computer Science), 1987
- The Johns Hopkins University, M. S. (Electrical Engineering and Computer Science), 1984
- University Of Roorkee, India, B. S. (Electronics Engineering), 1981

#### Professional Experience

- Chair, Department of Computer Science, UC Santa Barbara, 2011–Present.
- Director, Center for Geometric Computing, UC Santa Barbara, 2011–Present.
- Professor, University of California, Santa Barbara, 2000–Present.
- Visiting Professor, Swiss Federal Institute of Technology (ETH), Zurich, 2006–2007.
- Associate Professor with tenure, Washington University, 1997–2000.
- Associate Professor, Washington University, 1994–1997.
- Member of Technical Staff, Bellcore, 1987–1994

#### Awards and Honors

- *Fellow* of American Association for the Advancement of Science (AAAS), 2011.
- *Fellow* of Association of Computing Machinery (ACM), 2010.
- *Fellow* of Institute of Electrical and Electronic Engineers (IEEE), 2009.
- *ACM Distinguished Scientist*, 2007.
- Keynote Lecture, 6th Annual International Conference on Distributed Computing in Sensor Systems (DCOSS), June 21-23, 2010.
- Best paper award for “Approximate Isocontours and Spatial Summaries for Sensor Networks” at the 6th International Conference on Information Processing in Sensor Networks (IPSN '07), April 25-27, 2007 (co-authored with Sorabh Gandhi and John Hershberger).
- Best student paper award for “A General Framework for Clearing Auction of Wireless Spectrum” at IEEE DySPAN '07 (co-authored with Sorabh Gandhi, Chiranjeeb Buragohain, Lili Cao, and Haitao Zheng).

- Best paper award for “Profiling over Adaptive Ranges,” at the 4th Annual ACM/IEEE Int. Symp. on Code Generation and Optimization (CGO '06), Mar 26-29, 2006 (co-authored with S. Mysore, B. Agrawal, T. Sherwood and N. Shrivastava).
- Elected IEEE Senior Member, 2004.
- Vice President’s Research Excellence Award, Bellcore, Fall 1993.
- Vice President’s Research Excellence Award, Bellcore, Spring 1993.
- Exceptional Performance Award, Telco, India, 1983.
- Vice-Chancellor’s Gold Medal, University Of Roorkee, India, 1981.
- Best Student Prize, University of Roorkee, 1981.
- Ranked second in the National Entrance exam for Univ. of Roorkee, 1977.
- Third Place Prize in the State High School Examination, 1977.

## Research Interests

- Algorithms, Computational Geometry, Networked Sensing, Data Streams, Robotics, Game Theory.

## Research Grants

1. Social Network Analysis: Geometry, Dynamics and Inference for Very Large Data. (\$4,200,000). DARPA, FY 2012-2015.  
Joint with Profs. Madhow, Zhao, Zheng (UCSB) and HP Labs.
2. Uncertainty-aware Geometric Computing. (\$900,000)  
National Science Foundation, FY 2012–2015.  
Joint with L. Guibas (Stanford) and P. K. Agarwal (Duke).
3. Fast Traffic Measurement at All Time Scales. (\$75,000)  
Cisco Research Gift Fund, FY 2011-2012.  
S. Suri and G. Varghese (UCSD).
4. Dynamic Routing & Robotic Coordination for Oceanographic Sampling. (\$1,050,000)  
National Science Foundation, FY 2010–2013.  
Principal Investigator: F. Bullo (UCSB). Co-PIs: G. Sukhatme (USC) and S. Suri (UCSB).
5. Minimalist Mapping and Monitoring. (\$1,280,000)  
National Science Foundation, FY 2009–2013.  
Principal Investigator: S. Suri (UCSB). Co-PIs: S. LaValle (UIUC) and F. Bullo (UCSB).
6. WN: Real-time Spectrum Auctioning through Distributed Coordination. (\$100,000)  
National Science Foundation, FY '08.  
PI: H. Zheng (UCSB). Co-PI: S. Suri (UCSB).
7. Mimir: A Geometric Approach to Program Profiling. (\$300,000)  
National Science Foundation, FY '07–'10.  
PI: T. Sherwood (UCSB). Co-PI: S. Suri (UCSB).

8. Lightweight Monitoring Tools for Sensor Networks. (\$600,000)  
National Science Foundation, FY '06-'10.  
Principal Investigator: S. Suri (UCSB). Co-PIs: L. Guibas (Stanford), R. Govindan (USC).
9. Geometric Approaches to Ad Hoc and Sensor Networks. (\$20,000)  
National Science Foundation Workshop Grant.  
PI: S. Suri (UCSB). Co-PIs: L. Guibas and A. Efrat.
10. Geometric Computing over Distributed and Streaming Data. (\$300,000)  
National Science Foundation, FY '05-'11.  
Principal Investigator.
11. Information Processing in Sensor Networks. (\$420,000)  
Army Research Office and Institute for Collaborative Biotechnologies, FY '03-'06.  
PIs: D. Agrawal, A. Singh and S. Suri (UCSB).
12. Foundations of Electronic Marketplaces: Game Theory, Algorithms & Systems. (\$2,800,000)  
National Science Foundation medium ITR Grant, FY '01-'06.  
Collaborating investigators: T. Sandholm, A. Blum (CMU), M. Kao, M. Satterthwaite, R. Vohra (Northwestern), and S. Suri (UCSB).
13. Game theoretic methods in sensor networks.  
NSF REU grant, FY '05-'06. (\$6000)
14. Geometric algorithms for shape discovery and analysis.  
NSF REU grant, FY '04-'05. (\$6000)
15. Geometric Problems in Graphics, Databases, and Networking.  
National Science Foundation, FY '99-'03.  
Principal Investigator. (\$210,128)
16. Fast and Scalable Layer Four Switching.  
National Science Foundation, FY '98-'02.  
Co-PI with George Varghese and Jonathan Turner. (\$965,353)
17. Efficient Fair Queuing and Load Balancing.  
National Science Foundation, FY '96-'00.  
Co-PI with G. Varghese. (\$285,000)
18. Effective Visual Presentation of Computer Generated Information.  
National Science Foundation Instrumentation Grant, FY '97-'99.  
Co-PI with G.-C. Roman, P. M. Hubbard and E. T. Kraemer. (\$130,728)
19. Approximation Algorithms in Computational Geometry.  
National Science Foundation, FY '95-'08.  
Principal Investigator. (\$100,300)
20. Implementing minimum volume simplex algorithm.  
NSF REU supplement grant, FY '96. (\$5000)

## Graduate Student Advising

- James Hulsey, M.S. Project, *Survey of polygon searching*, 1996. (Washington University)
- Mingquan Xue, M.S. Project. *Scheduling problems in networking, and video broadcast schemes for latency-bandwidth tradeoffs*, 1998. (Washington University)
- Adam Smith, Undergraduate research project, “Rectangular Tiling in Multi-Dimensional Arrays,” 1998. (Washington University)
- Christine West, Undergraduate research project, “Algorithms for Minimum Volume Enclosing Simplex in  $R^3$ ,” 1999. (Washington University)
- Priyank Warkhede, M.S. Thesis, *IP Address Lookup and Packet Classification*, 2000. (Washington University)
- Yunhong Zhou. Ph.D. Thesis “*Shape-Sensitive Geometric Complexity*,” (Washington University) Now, Research Scientist, Microsoft.
- Amit Bhosle. M.S. Thesis “*On the Difficulty of Some Shortest Path Problems*,” 2003 (UCSB). Now with Amazon.com.
- Matthew Maxel. M.S. Thesis “*Computing  $k$  Shortest Simple Paths*,” 2003 (UCSB). Now with US Navy.
- Anshul Kothari, Ph.D. Thesis “*Algorithmic Issues in Internet-Centric Applications*,” 2005 (UCSB). Now with Google Labs, Mountain View.
- Jacqueline Hu. M.S. project, “*Localization and routing in Sensor Networks*,” 2006 (UCSB).
- Chiranjeev Bouragohain. Ph.D. Thesis “*Routing and Data Aggregation in Sensor Networks*,” 2006 (UCSB). First with Amazon, now with Blue Kai.
- Nisheeth Shrivastava. Ph.D. Thesis “*Geometric Synopses for Multi-Dimensional Data Streams*,” 2006 (UCSB). Research Scientist, Bell Labs, India.
- Sorabh Gandhi. Ph.D. Thesis “*Sensors, Streams, and Spectrum*,” 2009 (UCSB). Microsoft, Seattle.
- Andreas Baertschi. M.S. Thesis “*Conflict-free Chromatic Art Gallery Coverage*,” 2011 (ETH-UCSB Exchange Program).
- Pegah Kamousi. Ph.D. Thesis “*Combinatorial and Geometric Optimization over Stochastic Data*,” June 2012 (UCSB).  
Post-doctoral Fellow, Dept of Computer Science Dept., University Libre de Bruxelles, starting Fall 2012.
- Luca Foschini. Ph.D. Thesis “*Approximation Algorithms for Problems on Networks and Streams of Data*,” Sept 2012 (planned).  
Co-founder and Chief Scientist, AchieveMint, starting Fall 2012.
- Lovro Soldo, Sept 2012 (expected), ETH-UCSB, M.S.
- Hakan Yildiz, Ph.D. expected 2013.

- Kyle Klein, Ph.D. expected 2014.

## Post-Doctoral Advisees

- Csaba Toth (Ph.D. ETH Zurich), 2002-2004. Worked on data streams, game theory, and computational geometry. Now Asst. Professor at University of Calgary.

## Industrial Consulting

- Microsoft Research, 2010.
- Co-Founder and Chief Algorithms Architect for CombineNet, Inc, a software technology company, specializing in B2B commerce, 2000–2010.
- High Speed Networking Division, Ball Labs, Lucent, 1999.
- Image Minds, 1998-99.
- Theoretical Computer Science Division, Bell Labs, Lucent, 1998.

## Program Committees and Panels

- Member, Program Committee,, 30th Annual Symposium on Theoretical Aspects of Computer Science, Kiel, Germany, Feb 27–Mar 2, 2013.
- Member, Program Committee, ALGOSENSORS '12, Ljubljana, Slovenia, Sept 2012.
- Member, Program Committee, 8th ACM International Workshop on Foundations of Mobile Computing, Madeira, Portugal, 2012.
- Member, Program Committee, Colloquium on Structural Information and Communication Complexity, Reykjavik, Iceland, June 30 - July 2, 2012.
- Member, Program Committee, Algorithmic Foundations of Robotics, MIT, Cambridge, MA, June 13-15, 2012.
- Member, Program Committee, Information Processing in Sensor Networks, Beijing, China, April 16-20, 2012.
- Member, Program Committee, Algorithms and Data Structures Symposium, Brooklyn, NY, Aug 15-17, 2011.
- Member, Program Committee, ALGOSENSORS '11, Saarbruecken, Germany, 2011.
- Member, Program Committee, International Conference on Distributed Computing in Sensor Systems (DCOSS '11), Barcelona, Spain, June 27-29, 2011.
- Member, Program Committee, International Conference on Data Engineering (ICDE), Hannover, Germany, Apr 11-16, 2011.

- Member, Program Committee, International Conference on Intelligent Robots and Systems (IROS), Taipei, Oct 18-22, 2010.
- Member, Program Committee, 11th ACM Conference on E-Commerce (ACM EC), Boston, July 2010.
- Member, Program Committee, 9th Latin American Theoretical Informatics Symposium Oaxaca, Mexico, April 2010.
- Member, Program Committee, 20th International Symposium on Algorithms and Computation (ISAAC), Honolulu, Hawaii, Dec 2009.
- Member, Program Committee, ACM SenSys, Berkeley, CA, Nov. 2009.
- Vice-chair, International Conference on Distributed Computing in Sensor Systems (DCOSS), Marina Del Ray, June 8-10, 2009.
- Member, Program Committee, ACM Symposium on Principles of Database Systems (PODS) Providence, RI, June 2009.
- Member, Program Committee, ACM Symposium on Computational Geometry, Aarhus, Denmark, June 8-10, 2009.
- Member, Program Committee, International Conference on Information Processing in Sensor Networks (IPSN), San Francisco, April 13-16, 2009.
- Member, Program Committee, ALGOSENSORS, Reykjavik, Iceland, July 2008.
- Member, Program Committee, 5th International Workshop on Foundations of Mobile Computing, Toronto, August 2008.
- Member, Program Committee, 10th International Conference on Distributed Computing and Networking (ICDCN), Hyderabad, India, January 2009.
- Member, Program Committee, 9th ACM Conference on E-Commerce (ACM EC), Chicago, July 2008.
- Co-Chair, Technical Program Committee, 7th Annual Conference on Information Processing in Sensor Networks (IPSN), St. Louis, MO, 2008.
- Member, Program Committee, ACM International Workshop on Foundations of Wireless Ad hoc and Sensor Networking, Hong Kong, China, May 2008.
- Member, Program Committee, 4th International Workshop AlgoSensors 2008.
- Member, Program Committee, 5th ACM Conference on Embedded Networked Sensor Systems (SenSys), Sydney, Australia, Nov. 2007.
- Member, Program Committee, 6th Annual Conference on Information Processing in Sensor Networks (IPSN), MIT, Boston, 2007.
- Member, Program Committee, 3rd IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS), Santa Fe, NM, 2007.
- Co-organizer (with P. Widmayer and R. Wattenhofer), Workshop on Geometry in Sensor Networks, International Conference and Research Center for Computer Science, Schloss Dagstuhl, April 9–13, 2007.
- Member, Program Committee, 9th Annual Workshop on Algorithm Engineering and Experiments, (ALENEX), New Orleans, 2007.

- Co-organizer (with Leo Guibas and Alon Efrat), NSF Workshop on Algorithmic Approaches in Ad Hoc and Sensor Networks, June 12-13, Santa Barbara, 2006.
- Member, Program Committee, International Conference on Multisensor Fusion and Integration (MFI), Heidelberg, Oct. 2006.
- Member, Program Committee, 12th International Conference on Parallel and Distributed Systems (ICPADS), Minneapolis, 2006.
- Member, Program Committee, 13th Annual European Symposium on Algorithms (ESA), Ibiza, Oct. 3–6, 2005.
- Member, Program Committee, 16th International World Wide Web Conference (WWW), Chiba, Japan, May 10-14, 2005.
- Member, Program Committee, 3rd IFIP International Conference on Theoretical Computer Science, Toulouse, France, August 23-26, 2004.
- Member, Program Committee, ACM-SIAM Symposium on Discrete Algorithms (SODA), New Orleans, Jan 11–13, 2004.
- Member, Program Committee, 5th ACM Conference on Electronic Commerce (ACM EC), New York, 2004.
- Member, Program Committee, 18th National Conference on Artificial Intelligence (AAAI), Edmonton, Canada, July 2002.
- Chair (Theory Track) Program Committee, 18th ACM Symposium on Computational Geometry, Barcelona, Spain, June 2002.
- Member, Program Committee, Annual ACM-SIAM Symposium on Discrete Algorithms (SODA), San Francisco, Jan 2002.
- Member, Program Committee for *4th International Workshop on Discrete Algorithms and Methods for Mobile Computing and Communications*, Boston, August 2000.
- Member, Program Committee for *16th ACM Symposium on Computational Geometry*, Hong Kong, June 2000.
- Panel Member, Most Significant Contributions to Networking in the Last decade. 14th IEEE Annual Computer Communications Workshop, Colorado, 1999.
- Member, Video Review Committee for *ACM Symposium on Computational Geometry*, 1999.
- Member, Program Committee for *ACM Symposium on Theory of Computing (STOC)*, 1998.
- Chair, Program Committee for *7th Annual International Symposium on Algorithms and Computation*, Osaka, Japan, Dec. 1996.
- Member, Computational Geometry Working Group at *ACM Workshop on Strategic Directions in Computing Research*, MIT, Cambridge, MA, June 14-15, 1996.
- Member, Program Committee for *12th ACM Symposium on Computational Geometry*, Philadelphia, June 1996.
- Coordinator of DOOR (Donation of Conference Records) program 1992–1993. This program, supported by ACM, SIAM, and IEEE, donates conference proceedings to institutions in Third World and Eastern European countries.
- Co-Chair, Workshop on Geometric Complexity sponsored by the Center for Discrete Mathematics and Computer Science, Rutgers University, Oct. 16–20, 1989.

## Editorial Boards

- Editor, *ACM Transactions on Sensor Network*.
- Editor, *International Journal of Foundations of Computer Science*.
- Editor, *Computational Geometry: Theory and Applications*.
- Guest Editor, Special Issue of Discrete and Computational Geometry Journal, Vol. 31 (1), 2004.
- Guest Editor, *Lecture Notes in Computer Science* Vol. 1178.
- Reviewer for several computer science and discrete mathematics journals, including Journal of the ACM, Algorithmica, ACM Transactions on Sensor Networks, Computer Networks, Discrete Mathematics, Journal of Algorithms, Journal of Discrete and Computational Geometry, Journal of Computers and Systems Sciences, IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Journal of Robotics and Automation, SIAM Journal of Computing.
- Reviewer for NSF, NSERC, US-Israel, and Dutch granting agencies.



# Research Publications

## Peer-Reviewed Conference Papers

1. Catch me if you can: Pursuit and Capture in Polygonal Environments with Obstacles.  
Kyle Klein and Subhash Suri. *26th Conference on Artificial Intelligence (AAAI '12)*, Toronto, Canada, July 22-26, 2012.
2. On Klee's Measure Problem for Grounded Boxes.  
Hakan Yildiz and Subhash Suri. *28th ACM Symposium on Computational Geometry (SoCG '12)*, Chapel Hill, NC, June 16 - 20, 2012.
3. Conflict-free Chromatic Art Gallery Coverage.  
Andreas Baertschi and Subhash Suri. *29th Symposium on Theoretical Aspects of Computer Science (STACS '12)*, Paris, France, Feb 29 - Mar 3, 2012.
4. The Union of Probabilistic Boxes: Maintaining the Volume.  
Hakan Yildiz, Luca Foschini, John Hersberger, Subhash Suri.  
*Proc. of 19th Annual European Symposium on Algorithms (ESA)*, pp. 591-602, 2011.
5. Complete Information Pursuit Evasion in Polygonal Environments.  
Kyle Klein and Subhash Suri. *25th Conference on Artificial Intelligence (AAAI '11)*, San Francisco, CA, Aug 7-11, 2011.
6. A Discrete and Dynamic Version of Klee's Measure Problem.  
Hakan Yildiz, John Hersberger, Subhash Suri.  
*Proc. of 23rd Canadian Conference on Computational Geometry*, six pages, 2011.
7. Closest Pair and the Post Office Problem for Stochastic Points.  
Pegah Kamousi, Timothy Chan, and Subhash Suri.  
*Algorithms and Data Structures Symposium (WADS)*, Brooklyn, NY, Aug 15-17, 2011.
8. Stochastic Minimum Spanning Trees in Euclidean Spaces.  
Pegah Kamousi, Timothy Chan, and Subhash Suri.  
*Symposium on Computational Geometry (SoCG)*, Paris, France, June 13-15, 2011.
9. Efficiently Measuring Bandwidth at All Time Scales.  
Frank Uyeda, Luca Foschini, Subhash Suri and George Varghese.  
*Proc. 8th USENIX Symposium on Networked Systems Design & Implementation (NSDI '11)*, Boston, Mar 30–April 1, 2011.
10. On the Complexity of Time-Dependent Shortest Paths.  
Luca Foschini, John Hersberger, and Subhash Suri.  
*Proc. of Annual ACM-SIAM Symposium on Discrete Algorithms (SODA '11)*, San Francisco, Jan 23-25, 2011.
11. Stochastic Minimum Spanning Trees and Related Problems.  
Pegah Kamousi and Subhash Suri/  
*Proc. of Analytic Algorithmics and Combinatorics (ANALCO)*, Jan. 23-25, 2011,
12. Multiagent Pursuit Evasion, or Playing Kabaddi.  
Kyle Klein and Subhash Suri.  
*Int. Workshop on Algorithmic Foundations of Robotics (WAFR)*, Singapore, Dec 13-15, 2010.

13. Robot Kabaddi.  
Kyle Klein and Subhash Suri.  
*Proc. of 22nd Canadian Conference on Computational Geometry (CCCG)*, Winnipeg, August 9-11, 2010.
14. Space-efficient Online Approximation of Time Series Data: Streams, Amnesia, and Out-of-order.  
S. Gandhi, L. Foschini and S. Suri.  
*26th IEEE International Conference on Data Engineering (ICDE)*, March 2010.
15. Untangling the Braid: Finding Outliers in a Set of Streams.  
C. Buragohain, L. Foschini and S. Suri.  
*ALENEX 2010, SODA Workshop on Algorithm Engineering & Experiments*, Austin, TX, Jan 2010.
16. GAMPS: Compressing Multi Sensor Data by Grouping and Amplitude Scaling.  
S. Gandhi, S. Nath, J. Liu and S. Suri.  
*Proc. of ACM SIGMOD*, Providence, RI, pp. 771-784, 2009.
17. Reconstructing Visibility Graphs with Simple Robots.  
D. Bilo, Y. Disser, M. Mihalak, S. Suri, E. Vicari and P. Widmayer.  
*Proc. of 16th Int. Colloquium on Structural Information and Communication Complexity (SIROCCO)*, May 25-27, 13 pages, 2009.
18. eBay in the Sky: Strategy-Proof Wireless Spectrum Auctions.  
X. Zhou, S. Gandhi, S. Suri and H. Zheng.  
*ACM MOBICOM*, pp. 2-13, San Francisco, Sept 14-19, 2008. **Best Paper Nominee**
19. Angle Optimization in Target Tracking.  
B. Gfeller, M. Mihalak, S. Suri, E. Vicari and P. Widmayer.  
*Proc. of 11th Scandinavian Workshop on Algorithm Theory (SWAT)* pp. 65–76, Gothenburg, Sweden, July 2-4, 2008.
20. Target Counting under Minimal Sensing: Complexity and Approximations.  
S. Gandhi, R. Kumar and S. Suri.  
*Proc. of ALGOSENSORS*, pp. 30-42, Reykjavik, Iceland, July 2008.
21. Simplified Planar Coresets for Data Streams.  
J. Hersberger and S. Suri.  
*Proc. of 11th Scandinavian Workshop on Algorithm Theory (SWAT)*, pp. 5-16, Gothenburg, Sweden, July 2-4, 2008.
22. Catching Elephants with Mice: Sparse Sampling for Monitoring Sensor Networks.  
S. Gandhi, S. Suri and E. Welzl.  
*Proc. 5th ACM Conference on Embedded Networked Sensor Systems (SenSys)*, Nov. 6-9, 2007, Sydney, Australia.
23. Simple Robots with Minimal Sensing: From Local Visibility to Global Geometry.  
S. Suri, E. Vicari and P. Widmayer.  
*22nd Conference on Artificial Intelligence (AAAI-07)*, July 22-26, Vancouver, Canada.
24. Improved Throughput Bounds for Interference-aware Routing in Wireless Networks.  
C. Buragohain, S. Suri, C. Toth and Y. Zhou.  
*13th Computing and Combinatorics Conference (COCOON-07)*. July 16-19, Banff, Canada.

25. Counting Targets with Mobile Sensors in an Unknown Environment.  
Beat Gfeller, Matus Mihalak, Subhash Suri, Elias Vicari and Peter Widmayer.  
*Proc. of ALGOSENSORS*, July 2007, Wroclaw, Poland.
26. Approximate Isocontours and Spatial Summaries for Sensor Networks.  
S. Gandhi, J. Hershberger, and S. Suri.  
*Proc. IEEE IPSN '07*, April 25-27, Cambridge, MA. **Best Paper Award.**
27. Tracking Multiple Targets Using Binary Proximity Sensors.  
J. Singh, R. Kumar, U. Madhow, S. Suri, and R. Cagley. *Proc. IEEE IPSN '07*, April 25-27, Cambridge, MA.
28. A General Framework for Clearing Auction of Wireless Spectrum.  
S. Gandhi, C. Buragohain, L. Cao, H. Zheng and S. Suri.  
*Proc. of IEEE DySPAN*, April 17-20, Dublin, Ireland, 2007. **Best Student Paper Award.**
29. Space Efficient Streaming Algorithms for the Maximum Error Histogram.  
C. Buragohain, N. Shrivastava and S. Suri.  
*Proc. IEEE 23rd International Conference on Data Engineering (ICDE)*, April 16-20, Istanbul, Turkey, 2007.
30. Target Tracking with Binary Proximity Sensors: fundamental limits, minimal descriptions, and algorithms.  
N. Shrivastava, R. Mudumbai, U. Madhow and S. Suri.  
*The 4th ACM Conference on Embedded Networked Sensor Systems (SenSys '06)*, Nov. 1-3, 2006, Boulder, Colorado.
31. Search-quality Tradeoffs for Routing in Non-ideal Wireless Networks.  
C. Buragohain, D. Agrawal, and S. Suri.  
*3rd Annual IEEE Conference on Sensor, Mesh, and Ad Hoc Networks (SECON'06)*, Sept 25-28, 2006, Virginia.
32. Contour Approximation in Sensor Networks.  
C. Buragohain, S. Gandhi, J. Hershberger and S. Suri.  
*Proc. of 2nd Int. Conference on Distributed Computing in Sensor Systems (DCOSS)*, June 18-20, 2006, San Francisco.
33. Distributed Navigation Algorithms for Sensor Networks.  
C. Buragohain, D. Agrawal and S. Suri.  
*Proc. of IEEE INFOCOM '06*, Apr 25-27, Barcelona.
34. Cluster Hull: A Technique for Summarizing Spatial Data Streams.  
J. Hershberger, N. Shrivastava and S. Suri.  
*Proc. of 22nd International Conference on Data Engineering (ICDE)*, 2006, Atlanta.
35. Profiling over Adaptive Ranges.  
S. Mysore, B. Agrawal, T. Sherwood, N. Shrivastava and S. Suri.  
*Proc. of 4th Annual ACM/IEEE International Symposium on Code Generation and Optimization*, Mar 26-29, 2006. Received the **Best Paper Award.**
36. Summarizing Spatial Data Streams Using ClusterHulls.  
N. Shrivastava, J. Hershberger, and S. Suri.  
*Proc. of ALENEX*, Jan 21-25, 2006, Miami.  
*Invited to Special Issue of ACM Journal of Experimental Algorithms.*

37. Detecting Cuts in Sensor Networks.  
N. Shrivastava, S. Suri and C. Toth.  
*Proc. of 4th Int. Symposium on Information Processing in Sensor Networks (IPSN)*, 2005.
38. Space Complexity of Hierarchical Heavy Hitters in Multi-Dimensional Data Streams.  
J. Hershberger, N. Shrivastava, S. Suri and C. Toth.  
*Proceedings of ACM Symp. on Principles of Database Systems (PODS)*, 2005.
39. Interval Subset Sum and Uniform-Price Auction Clearing.  
A. Kothari, S. Suri and Y. Zhou.  
*Proc. of 11th International Computing and Combinatorics Conference*, 2005.
40. Attribute-Based Access to Distributed Data over P2P Networks.  
D. Agrawal, A. El Abbadi and S. Suri.  
*Proc. Workshop on Databases in Networked Information Systems*, 2005.
41. Medians and Beyond: New Aggregation Techniques for Sensor Networks.  
N. Shrivastava, C. Buragohain, D. Agrawal and S. Suri.  
*Proc. of 2nd ACM Conference on Embedded Networked Sensor Systems (SenSys)*, 2004.
42. Adaptive Spatial Partitioning for Multidimensional Data Streams.  
J. Hershberger, N. Shrivastava, S. Suri and C. Toth.  
*Proc. of 15th International Symp. on Algorithms and Computation (ISAAC'04)*, 2004.
43. Binary Space Partitions of Orthogonal Subdivisions.  
J. Hershberger, S. Suri and C. Toth.  
*Proc. of ACM Symposium on Computational Geometry*, pp. 230-238, 2004.
44. Adaptive Sampling for Geometric Problems over Data Streams.  
J. Hershberger and S. Suri.  
*Proc. of ACM Symp. on Principles of Database Systems (PODS)*, pp. 252-262, 2004.
45. Selfish Load Balancing and Atomic Congestion Games.  
S. Suri, C. Toth and Y. Zhou.  
*Proc. of ACM Symp. on Parallelism in Algorithms & Architectures (SPAA)*, 2004.
46. Congestion Games, Load Balancing, and Price of Anarchy. A. Kothari, S. Suri, C. Toth and Y. Zhou. *Proc. Workshop on Combinatorial and Algorithmic Aspects of Networking*, pp. 13-27, 2004.
47. Uncoordinated Load Balancing and Congestion Games in P2P Systems.  
S. Suri, C. Toth and Y. Zhou.  
*Proc. of 3rd International Workshop on Peer-to-Peer Systems (IPTPS)*, 2004.
48. Range Counting over Multidimensional Data Streams.  
S. Suri, C. Toth and Y. Zhou.  
*Proc. of ACM Symposium on Computational Geometry*, 2004.
49. Solving Combinatorial Exchanges: Optimality via a Few Partial Bids.  
A. Kothari, T. Sandholm and S. Suri.  
*Proc. 3rd International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 2004.
50. Towards Realistic Mobility Models for Mobile Ad hoc Networks.  
A. Jardosh, E. Belding-Royer, K. Almeroth and S. Suri.  
*Proc. of ACM Mobicom*, pp. 217–229, 2003.

51. Range Addressable Network: A P2P Cache Architecture for Data Ranges.  
A. Kothari, D. Agrawal, A. Gupta and S. Suri.  
*Proceedings of IEEE P2P*, pp. 14–22, 2003.
52. A Game-Theoretic Framework for Incentives in P2P Systems.  
C. Buragohain, D. Agrawal and S. Suri.  
*Proceedings of IEEE P2P*, pp. 48–56, 2003.
53. Bandwidth Constrained Allocation in Grid Computing.  
A. Kothari, S. Suri, and Y. Zhou.  
*Workshop on Algorithms and Data Structures (WADS), July 30- Aug 1, Ottawa, 2003.*
54. Convex Hulls and Related Problems in Data Streams.  
J. Hershberger and S. Suri.  
ACM SIGMOD Workshop on Management and Processing of Data Streams, 2003.
55. Approximately-Strategyproof and Tractable Multi-Unit Auctions.  
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- Bid Modification Based on Logical Connections Between Trigger Groups in a Combinatorial Exchange, (Patent number US 8,190,489, issued 05/29/2012).
- Overconstraint detection, Rule Relaxation and Demand Reduction in a Combinatorial Exchange, (Patent number US 8,190,490, issued 05/29/2012).
- Items Ratio Based Price/Discount Adjustment in a Combinatorial Auction, (Patent number US 8,195,524, issued 06/05/2012).