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EMPLOYMENT

Associate Professor, National University of Singapore, Singapore	07/2013 - present
Associate Professor, Rensselaer Polytechnic Institute, Troy, NY, USA	07/2007 - 06/2013
Assistant Professor, Rensselaer Polytechnic Institute, Troy, NY, USA	08/2001 - 06/2007

EDUCATION

Ph.D, Rensselaer Polytechnic Institute, Troy, NY, USA	August 2001
M. Tech, Indian Institute of Technology, Kanpur, India	May 1998
B. Tech, North Eastern Hill University, Shillong, India	May 1996

EXPERIENCE

Associate Professor, National University of Singapore, Singapore	7/2013 - Present
Associate Professor, Rensselaer Polytechnic Institute, Troy, NY, USA	7/2007 - 06/2013
Leiv Eiriksson Fellow, Simula Research Laboratories, Oslo, Norway	6/2011 - 8/2011
Visiting Professor, Massachusetts Institute of Technology, Boston, MA, USA	3/2011 - 5/2011
Visiting Fellow, University of Sydney, Sydney, Australia	12/2010 - 2/2011
JSPS Fellow, Kansai University, Osaka, Japan	10/2010 - 11/2010
Visiting Professor, KTH Royal Institute of Technology, Stockholm, Sweden	8/2010 - 9/2010
Visiting Professor, Indian Institute of Technology, Bombay, India	6/2010 - 7/2010
Assistant Professor, Rensselaer Polytechnic Institute, Troy, NY, USA	8/2001 - 6/2007
Tan Chin Tuan Fellow, Nanyang Technological University, Singapore	7/2005 - 9/2005
Étudiant Visitant (Visiting Student), INRIA, Rocquencourt, France	5/2000 - 8/2000
Research Associate, Indian Institute of Technology, Kanpur, India	12/1997 - 6/1998
Summer Intern, Department of Telecommunications, Calcutta, India	5/1995 - 7/1995

RESEARCH INTERESTS

Computer networks: Protocols and performance
Internet-of-things and machine-to-machine communications
Network security
Smart grids and green computer networks

RESEARCH GRANTS

1. **Title:** *Piracy and Malware in Computer Hardware from Unsecured Supply Chains,* **Agency:** Microsoft Corporation, Singapore, **Funds: US$ 215,000**, **Duration:** 2013-2014, **Contribution:** 100%.

2. **Title:** *Towards Green Networks: Solutions for Wireless Access,* **Agency:** Ministry of Education, Singapore, **Funds: US$ 142,000**, **Duration:** 2013-2016, **Contribution:** 100%.

3. **Title:** *CURENT: Center for Ultra-wide-area Resilient Electric Energy Transmission Networks,* **Agency:** National Science Foundation, USA, **Funds: US$ 2,000,000**, **Duration:** 2011-2016, **Contribution:** 20%.

4. **Title:** *New York State Phasor Measurement Network,* **Agency:** New York State Energy Research and Development Agency, USA, **Funds: US$ 250,000**, **Duration:** 2010-2012, **Contribution:** 50%.

5. **Title:** *Green Solutions for Wireless Network Access,* **Agency:** Research Council of Norway, **Funds: US$ 30,000**, **Duration:** 2011-2011, **Contribution:** 100%.

6. **Title:** *Biologically Motivated Models for Spatio-Temporal Behavior of Computer Networks: Performance, Growth and Pathological Behavior,* **Agency:** National Science Foundation, USA, **Funds: US$ 402,000**, **Duration:** 2004-2010, **Contribution:** 100%, (NSF CAREER Award)

7. **Title:** *WiMax Application Performance and System Simulation,* **Agency:** WiMax Forum, USA, **Funds: US$ 227,000**, **Duration:** 2006-2009, **Contribution:** 100%.

8. **Title:** *Community Wireless Networks for Last-Mile Broadband Interconnectivity: An Experimental Research Program,* **Agency:** National Science Foundation, USA, **Funds: US$ 350,000**. **Duration:** 2004-2008, **Contribution:** 50%.

9. **Title:** *Infrastructure Mesh Wireless Networks,* **Agency:** Intel Corporation, USA, **Funds: US$ 205,000**, **Duration:** 2004-2006, **Contribution:** 50%.

10. **Title:** *Scalable Online Network Modeling and Simulation,* **Agency:** Defense Advanced Research Project Agency (DARPA), USA, **Funds: US$ 950,000**, **Duration:** 2001-2004, **Contribution:** 25%

11. **Title:** *High Performance Robust Network Management: Theoretical Foundations and Practical Design Tools,* **Agency:** RPI, USA, **Funds: US$ 50,000**, **Duration:** 2002-2002, **Contribution:** 17%

TEACHING AND CURRICULUM DEVELOPMENT

1. **Courses Taught:**

    (a) Broadband and Optical Networking (Graduate)
    (b) Computer Architecture, Networks and Operating Systems
    (c) Computer Communication Networks
    (d) Introduction to Engineering Design
    (e) Probability for Engineering Applications

2. **Courses Developed (and Taught):**

    (a) Modeling and Analysis of Computer Networks (Graduate)
    (b) Cellular and Mobile Communications (Graduate)
    (c) Computer Networking Fundamentals (Graduate)
    (d) Experimental Networking

STUDENTS

1. **PhD Graduated:**

   (1) **Jun Peng:** 2004, First Employment: Associate Professor, University of Texas, Pan American.
   (2) **Fengji Ye:** 2005, First Employment: Cisco systems, San Jose, CA.
   (3) **Hua Yang:** 2005, First Employment: Intel Research Laboratories, Shanghai, China.
   (4) **Shivani Deshpande:** 2007, First Employment: Packeteer Inc., San Jose, CA.
   (5) **Rajagopal Iyengar:** 2007, First Employment: Posdata-USA, San Jose, CA.
   (6) **Krishna Ramachandran:** 2007, First Employment: General Motors Research Laboratory, Bangalore, India.
   (7) **Haiming Yang:** 2008, First Employment: Cisco systems, San Jose, CA.
   (8) **Xiaobo Long:** 2008, First Employment: Goldman Sachs, New York, NY.
   (9) **Huijiang Li:** 2012, First Employment: Oracle Corporation, San Jose, CA.
   (10) **Muhammad Aman:** 2012, First Employment: Assistant Professor, National University of Computer and Emerging Sciences, Peshawar, Pakistan.
   (11) **Onkar Bhardwaj:** 2015, First Employment: Post Doctoral Researcher, IBM T. J. Watson Research Center, Yorktown Heights, NY.

2. **MS Graduated: 7**
3. **PhD Current: 5**
4. **MS Current: 1**

HONORS AND AWARDS

1. Leiv Eiriksson Fellowship, Norway, 2011.
2. JSPS Fellowship, Japan, 2010.
3. Best Paper Award, IEEE GLOBECOM, New Orleans, LA, 2008.
4. Individual Contribution Award, WiMAX Forum, San Jose, CA, USA, 2008.
5. Teaching Excellence Award, School of Engineering, RPI, Troy, NY 2006.
6. Tan Chin Tuan Fellowship, Singapore, 2005.
7. National Science Foundation (NSF) CAREER Award, 2004.
8. Charles M. Close Doctoral Prize, RPI, Troy, NY
9. ECSE Departmental Service Award, RPI, Troy, NY
10. Founder's Award of Excellence, RPI, Troy, NY
11. Master Teaching Assistant, RPI, Troy, NY
12. Verifone Fellowship, IIT, Kanpur, India
13. State Scholarship, NEHU, Shillong, India
14. Eta Kappa Nu
15. Tau Beta Pi

PROFESSIONAL ACTIVITIES

Associate Editor:

- IEEE Transactions on Mobile Computing (2014-present).
- IEEE Transactions on Communications (2008-2012).

TPC Co-Chair:

- IEEE ICCS, Networks Track, 2014.
- IEEE GLOBECOM, Communications Software and Services Symposium, 2009.
- IEEE BROADNETS, Wireless Track, 2009.

Panelist: National Science Foundation.

External Reviewer: National Research Council of Canada, Austrian Science Fund, Czech Science Foundation, Netherlands Organisation for Scientific Research.

TPC member: IEEE INFOCOM (2003-2015), IEEE GLOBECOM (2002, 2005, 2007, 2008, 2009), IEEE VTC (2007), IEEE ICC (2005, 2007, 2008, 2009, 2010), ICMU (2004-2015), IEEE WCNC (2005, 2006, 2010, 2011).

Journal Reviews: IEEE Transactions on Computers, IEEE/ACM Transactions on Networking, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Wireless Communications, IEEE Transactions on Communications, IEEE Transactions on Mobile Computing, IEEE Transactions on Signal Processing, IEEE Transactions on Vehicular Technology, IEEE Transactions on Multimedia, IEEE Transactions on Automatic Control, IEEE Transactions on Intelligent Transportation Systems, IEEE Transactions on Smart Grid, ACM Transactions on Sensor Networks, Computer Networks, Performance Evaluation, IEEE Communications Magazine, IEEE Communication Letters

Conference Reviews: IEEE INFOCOM, IEEE ICC, IEEE GLOBECOM, IEEE/IFIP MMNS, SPECTS, ICON, TRIDENTCOM, IEEE VTC, IEEE WSN, IEEE ISCC, ACM MSWIM, WiOpt

KEYNOTES AND TUTORIALS

1. *Network Evolution for the Internet of Things,* Keynote at IEEE IACC, Bangalore, India, June 2014.

2. *Network Infrastructure for the Internet of Things and M2M Communications,* Tutorial at IEEE BlackSeaCom, Constanta, Romania, May 2015.

3. *Network Infrastructure for the Internet of Things and M2M Communications,* Tutorial at National Conference on Communications, IIT Bombay, India, February 2015.

4. *Network Evolution for the Internet of Things,* Keynote at IEEE AIMoC, Kolkata, India, February 2014.

5. *Network Evolution for the Internet of Things,* Keynote at International Conference on Intelligent Computing and Applications, Durgapur, India, December 2014.

6. *Security for Sensor Networks,* Plenary talk at International Conference on Computational Intelligence, Cyber Security and Computational Models, Coimbatore, India, December 2013.

PATENTS

1. **Network management and control using on-line collaborative simulations**, US Patent No. 7,363,285, April 2008, (with S. Kalyanaraman et al.).

PUBLICATIONS
Book Chapters

6. X. Long and B. Sikdar, "Detection of Session Hijacks Using Received Signal Strength in Wireless Networks ," *Security Engineering Techniques and Solutions for Information Systems: Management and Implementation,* IGI Global, 2013.

5. H. Li, N. Jaggi and B. Sikdar, "Cooperative Relay Scheduling in Energy Harvesting Sensor Networks," *GreenIT: Technologies and Applications,* Springer-Verlag, 2011.

4. X. Long and B. Sikdar, "MAC and Routing Protocols for Vehicle to Vehicle Networks," *Automotive Informatics and Communicative Systems: Principals in Vehicular Networks and Data Exchange,* IGI Global, 2009.

3. R. Iyengar, K. Kar, B. Sikdar and X. Luo, "Scheduling Algorithms for OFDMA based WiMAX Systems with QoS Constraints," *WiMAX: Technologies, Performance Analysis and QoS, Part I: Technologies,* CRC Press, 2007.

2. S. Kalyanaraman and B. Sikdar, "Protocol Design Concepts, TCP/IP, and the Network Layer," *IP over WDM: Building the Next-Generation Optical Internet,* Sudhir Dixit (Editor), Wiley, April 2003.

1. B. Sikdar and K. S. Vastola, "On the Contribution of TCP to the Self-Similarity of Network Traffic," *Lecture Notes in Computer Science,* vol. 2170, pp. 596-613, 2001.

Journals (accepted and published)

42. J, Chen and B. Sikdar, "Queue-Aware Optimal Frequency Selection for Energy Minimization in Wireless Networks," *IEEE Latin America Transactions,* 2015.

41. V. Chamola and B. Sikdar, "A Multi-State Markov Model for Dimensioning Solar Powered Cellular Base Stations," *IEEE Transactions on Sustainable Energy,* 2015.

40. A. Rajandekar and B. Sikdar, "A Survey of MAC Layer Issues and Protocols for Machine-to-Machine Communications," *IEEE Internet of Things Journal,* vol. 2, no. 2, pp. 175-186, April 2015.

39. H. Yang, H.-Y. Shen and B. Sikdar, "An Energy Saving Throughput-Optimal MAC Protocol for Cooperative MIMO Transmissions," *IEEE Transactions on Communications,* vol. 61, no. 12, pp. 4899-4909, December 2013.

38. S. Zhang, A. Seyedi and B. Sikdar, "An Analytical Approach to the Design of Energy Harvesting Wireless Sensor Nodes," *IEEE Transactions on Wireless Communications,* vol. 12, no. 8, pp. 4010-4024, August 2013.

37. M. Aman and B. Sikdar, "A CART Based Mechanism for Collision Detection in IEEE 802.11," *IEEE Latin America Transactions,* vol. 11, no. 3, pp. 920-926, May 2013.

36. B. Sikdar, "A Study of the Environmental Impact of Wireless Local Area Network Access," *IEEE Transactions on Consumer Electronics,* vol. 59, no. 1, pp. 85-92, February 2013.

35. H. Yang and B. Sikdar, "Queueing Analysis of Polling Based Wireless MAC Protocols with Sleep-Wake Cycles," *IEEE Transactions on Communications,* vol. 60, no. 9, pp. 2427-2433, September 2012.

34. R. Iyengar and B. Sikdar, "A Queueing Model for Polled Service in WiMAX/IEEE 802.16 Networks," *IEEE Transactions on Communications,* vol. 60, no. 7, pp. 1777-1781, July 2012.

33. B. Sikdar, "Comparison of Broadcasting Schemes for Infrastructure to Vehicular Communications," *IEEE Transactions on Intelligent Transportation Systems,* vol. 13, no. 2, pp. 492-502, June 2012.

32. B. Sikdar and J. Chow, "Defending Synchrophasor Data Networks Against Traffic Analysis Attacks," *IEEE Transactions on Smart Grid,* vol. 2, no. 4, pp. 819-826, December 2011..

31. H. Li and B. Sikdar, "Throughput Guarantee for Maximal Schedulers in Sensor Networks with Cooperative Relays," *IEEE Transactions on Communications,* vol. 59, no. 12, pp. 3265-3217, December 2011.

30. H. Li, N. Jaggi and B. Sikdar, "Relay Scheduling for Cooperative Communications in Sensor Networks with Energy Harvesting," *IEEE Transactions on Wireless Communications,* vol. 10, no. 9, pp. 2918-2928, September 2011.

29. K. Ramachandran and B. Sikdar, "Dynamics of Malware Spread in Decentralized Peer to Peer Networks," *IEEE Transactions on Dependable and Secure Computing,* vol. 8 , no. 4, pp. 617-623, July/August 2011.

28. B. Sikdar, "Characterization and Abatement of the Reassociation Overhead in Vehicle to Roadside Networks," *IEEE Transactions on Communications,* vol. 58, no. 11, pp. 3296-3304, November 2010.

27. A. Seyedi and B. Sikdar, "Energy Efficient Transmission Strategies for Body Sensor Networks with Energy Harvesting," *IEEE Transactions on Communications,* vol. 58, no. 7, pp. 2116-2126, July 2010.

26. K. Ramachandran and B. Sikdar, "A Population Based Approach to Model the Lifetime and Energy Distribution in Battery Constrained Wireless Sensor Networks," *IEEE Journal on Selected Areas in Communications,* vol. 28, no. 4, pp. 576-586, May 2010.

25. X. Long and B. Sikdar, "A Mechanism for Detecting Session Hijacks in Wireless Networks," *IEEE Transactions on Wireless Communications,* vol. 9, no. 4, pp. 1380-1389, April 2010.

24. K. Ramachandran and B. Sikdar, "A Queueing Model for Evaluating the Transfer Latency of Peer to Peer Systems," *IEEE Transactions on Parallel and Distributed Systems,* vol. 21. no. 3, pp. 367-378, March 2010.

23. B. Sikdar, "Queueing Analysis of Polling Service Classes in the IEEE 802.16 MAC Protocol," *IEEE Transactions on Wireless Communications.* vol. 8, no. 12, pp. 5767-5772, December 2009.

22. S. Deshpande, M. Thottan, T. Ho and B. Sikdar, "An Online Mechanism for BGP Instability Detection and Analysis," *IEEE Transactions on Computers,* vol. 58, no. 11, pp. 1470-1484, November 2009.

21. F. Ye, H. Yang, H. Yang and B. Sikdar, "A Distributed Coordination Scheme to Improve the Performance of IEEE 802.11 in Multi-hop Networks," *IEEE Transactions on Communications,* vol. 57, no. 10, pp. 2903-2908, October 2009.

20. B. Stephenson and B. Sikdar, "A Quasi-species Model for the Propagation and Containment of Polymorphic Worms," *IEEE Transactions on Computers,* vol. 58, no. 9, pp. 1289-1296, September 2009.

19. J. Peng, B. Sikdar and L. Cheng, "Multicasting With Localized Control In Wireless Ad-Hoc Networks," *IEEE Transactions on Mobile Computing,* vol. 8, no. 1, pp. 52-64, January 2009.

18. G. Nagy and B. Sikdar, "Classification and Evaluation of Examples for Teaching Probability to Electrical Engineering Students," *IEEE Transactions on Education,* vol. 51, no. 4, pp. 476-483, November 2008.

17. H. Yang, F. Ye and B. Sikdar, "A Swarm Intelligence Based Protocol for Data Acquisition in Networks with Mobile Sinks," *IEEE Transactions on Mobile Computing,* vol. 7, no. 8, pp. 932-945, August 2008.

16. O. Tickoo and B. Sikdar, "Modeling Queueing and Channel Access Delay in Unsaturated IEEE 802.11 Random Access MAC Based Wireless Networks," *IEEE/ACM Transactions on Networking,* vol. 16, no. 4, pp. 878-891, August 2008.

15. S. Deshpande, M. Thottan and B. Sikdar, "An Online Scheme for the Isolation of BGP Misconfiguration Errors," *IEEE Transactions on Network and Services Management,* vol. 5, no. 2, pp. 78-90, June 2008.

14. J. Peng, L. Cheng and B. Sikdar, "A Wireless MAC Protocol with Collision Detection," *IEEE Transactions on Mobile Computing,* vol. 6, no. 12, pp. 1357-1369, December 2007.

13. H. Yang, F. Ye and B. Sikdar, "Distributed Mobility Transparent Broadcasting in Vehicle to Vehicle Networks," *IEEE Transactions on Vehicular Technology,* vol. 56, no. 6, pp. 3289-3299, November 2007.

12. F. Ye, S. Yi and B. Sikdar, "Scaling of Spatial Reuse and Saturation Throughput in a Class of MAC Protocols," *IEEE Transactions on Wireless Communications,* vol. 6, no. 10, pp. 3529-3533, October 2007.

11. B. Sikdar, "An Analytic Model for the Delay in IEEE 802.11 PCF MAC based Wireless Networks," *IEEE Transactions on Wireless Communications,* vol. 6, no. 4, pp. 1542-1550, April 2007.

10. K. Chandrayana, S. Ramakrishnan, B. Sikdar and S. Kalyanaraman, "On Randomizing the Sending Times in TCP and other Window Based Algorithms," *Computer Networks,* vol. 50, no. 3, pp. 422-447, February 2006.

9. K. Ramachandran and B. Sikdar, "A Population Based Approach to Model Network Lifetime in Wireless Sensor Networks," *ACM Performance Evaluation Review,* vol. 33, no. 2, pp. 21-23, September 2005.

8. J. Peng and B. Sikdar, "An Efficient and Scalable Loss Recovery Scheme for Video Multicast," *IEEE Transactions on Multimedia,* vol. 7, no. 2, pp. 356-365, April 2005.

7. J. Peng and B. Sikdar, "Multi-layer Multicast Congestion Control in Satellite Environments," *IEEE Journal on Selected Areas in Communications,* vol. 22, no. 4, pp. 449-461, May 2004.

6. B. Sikdar, S. Kalyanaraman and K. S. Vastola, "Analytic Models for the Latency and Steady-State Throughput of TCP Tahoe, Reno and SACK," *IEEE/ACM Transactions on Networking,* vol. 11, no. 6, pp. 959-971, December 2003.

5. O. Tickoo and B. Sikdar, "On the Impact of IEEE 802.11 MAC on Traffic Characteristics," *IEEE Journal on Selected Areas in Communications,* vol. 21, no. 2, pp. 189-203, February 2003.

4. D. Manjunath and B. Sikdar, "Variable Length Packet Switches: Delay Analysis of Crossbar Switches Under Poisson and Self-similar Traffic," *Computer Communications,* vol. 26, no. 6, pp. 590-610, April, 2002.

3. B. Sikdar, S. Kalyanaraman and K. S. Vastola, "An Integrated Model for the Latency and Steady State Throughput of TCP Connections," *Performance Evaluation,* vol. 46, no. 2-3, pp. 139-154, September 2001.

2. D. Manjunath and B. Sikdar, "Integral Expressions for the Numerical Evaluation of Product Form Expressions over Irregular Multidimensional Integer State Spaces (extended version)," *Telecommunication Systems,* vol. 16, no. 1,2, pp. 195-215, January 2001.

1. B. Sikdar and D. Manjunath, "Queueing Analysis of Scheduling Policies in Copy Networks of Space Based Multicast Packet Switches," *IEEE/ACM Transactions on Networking,* vol. 8, no. 3, pp. 396-406, July 2000.

Conferences

97. S. Pal, B. Sikdar and J. Chow, "Detecting Malicious Manipulation of Synchrophasor Data," *Proceedings of IEEE SmartGridComm,* Miami, FL, November 2015.

96. V. Chamola and B. Sikdar, "Outage Estimation for Solar Powered Cellular Base Stations," *Proceedings of IEEE ICC,* London, United Kingdom, June 2015.

95. A. Rajandekar and B. Sikdar, "On Exploiting White Spaces in WiFi Networks for Opportunistic M2M Communications," *Proceedings of IEEE LANMAN,* Beijing, China, April 2015.

94. V. Chamola and B. Sikdar, "Synthetic Generation of Hourly Solar Irradiance Using a Multi-State Markov Model," *Proceedings of IEIE/IEEE ICEIC,* Singapore, January 2015.

93. V. Chamola and B. Sikdar, "Resource Provisioning and Dimensioning for Solar Powered Cellular Base Stations," *Proceedings of IEEE GLOBECOM,* Austin, TX, December 2014.

92. S. Pal and B. Sikdar, "A Mechanism for Detecting Data Manipulation Attacks on PMU Data," *Proceedings of IEEE ICCS,* Macau, China, November 2014.

91. V. Chamola and B. Sikdar, "Dimensioning Stand-Alone Cellular Base Station using Series-of-Worst-Months Meteorological Data," *Proceedings of IEEE ICCS,* Macau, China, November 2014.

90. J. Chen and B. Sikdar, "Queue-Aware Optimal Frequency Selection for Energy Minimization in Wireless Networks," *Proceedings of IEEE Latincom,* Cartagena, Colombia, November 2014.

89. S. Pal, B. Sikdar and J. Chow, "Real-Time Detection of Packet Drop Attacks on Synchrophasor Data," *Proceedings of IEEE SmartGridComm,* Venice, Italy, November 2014.

88. J. Chen and B. Sikdar, "Addressing the Energy-Delay Tradeoff in Wireless Networks with Load-Proportional Energy Usage," *Proceedings of IEEE ICC,* Sydney, Australia, June 2014.

87. S. Pal, H. Li, B. Sikdar and J. Chow, "A Mechanism for Detecting Gray Hole Attacks on Synchrophasor Data," *Proceedings of IEEE ICC,* Sydney, Australia, June 2014.

86. M. Aman and B. Sikdar, "A MAC Protocol for Efficient Packet Recovery," *Proceedings of IEEE LANMAN,* Reno, NV, May 2014.

85. H. Li and B. Sikdar, "Optimal Parameter Selection for Discrete-Time Throughput-Optimal MAC Protocols," *Proceedings of IEEE WCNC,* Istanbul, Turkey, April 2014.

84. M. Aman, B. Sikdar and W. Chan, "Efficient Packet Recovery in Wireless Networks," *Proceedings of IEEE WCNC,* Istanbul, Turkey, April 2014.

83. J. Chen and B. Sikdar, "A Mechanism for Load Proportional Energy Use in Wireless Local Area Networks," *Proceedings of IEEE GLOBECOM,* Atlanta, GA, December 2013.

82. M. Aman, W. Chan and B. Sikdar, "Collision Detection in IEEE 802.11 Networks by Error Vector Magnitude Analysis," *Proceedings of IEEE GLOBECOM,* Los Angeles, CA, December 2012.

81. B. Sikdar and M. Yamamoto, "On the Throughput Optimality of Distributed MAC Protocols for Directional Antennas," *Proceedings of IEEE LATINCOM,* Cuenca, Ecuador, November 2012.

80. M. Aman and B. Sikdar, "A CART Based Mechanism for Collision Detection in IEEE 802.11," *Proceedings of IEEE LATINCOM,* Cuenca, Ecuador, November 2012.

79. H. Li, N. Jaggi and B. Sikdar, "An analytical approach towards cooperative relay scheduling under partial state information," *Proceedings of IEEE INFOCOM,* Orlando, FL, April 2012.

78. H. Li, N. Jaggi and B. Sikdar, "Cooperative Relay Scheduling under Partial State Information in Energy Harvesting Sensor Networks," *Proceedings of IEEE GLOBECOM,* Miami, FL, December 2010.

77. H. Li and B. Sikdar, "A performance Guarantee for Maximal Schedulers in Sensor Networks with Cooperative Relays," *Proceedings of IEEE GLOBECOM,* Miami, FL, December 2010.

76. B. Sikdar, "Environmental Impact of IEEE 802.11 Access Points: A Case Study," *Proceedings of ACM GreenMetrics,* New York, NY, June 2010.

75. H. Yang and B. Sikdar, "Delay and Energy Models for Polling Based MAC Protocols with Sleep-Wake Cycles," *Proceedings of IEEE ICC,* Cape Town, South Africa, May 2010.

74. A. Seyedi and B. Sikdar, "Performance Modeling of Transmission Schedulers for Sensor Networks Capable of Energy Harvesting," *Proceedings of IEEE ICC,* Cape Town, South Africa, May 2010.

73. H. Li and B. Sikdar, "Relay Usage Scheduling in Sensor Networks with Energy Harvesting," *Proceedings of IEEE ICC,* Cape Town, South Africa, May 2010.

72. M. Aman, B. Sikdar and S. Parekh, "Scalable Peer-to-Peer Video Streaming in WiMAX Networks," *Proceedings of IEEE GLOBECOM,* Honolulu, HI, December 2009.

71. K. Ramachandran and B. Sikdar, "A Framework for Modeling the Lifetime and Residual Energy Distribution in Wireless Networks," *Proceedings of IEEE GLOBECOM,* Honolulu, HI, December 2009.

70. H. Yang, B. Sikdar and S. Kalyanaraman, "A Threshold Based MAC Protocol for Cooperative MIMO Transmissions," to appear in *Proceedings of IEEE INFOCOM,* minisymposium, Rio de Janerio, Brazil, April, 2009.

69. X. Guo, R. Rouil, C. Soin, S. Parekh, B. Sikdar and S. Kalyanaraman, "WiMAX System Design and Evaluation Methodology using the NS-2 Simulator," *Proceedings of WISARD,* Bangalore, India, January 2009.

68. B. Sikdar, "A Broadcasting Scheme for Infrastructure to Vehicle Communications," *Proceedings of IEEE GLOBECOM,* New Orleans, LA, December 2008.

67. H. Yang and B. Sikdar, "A Mobility Based Architecture for Underwater Acoustic Sensor Networks," *Proceedings of IEEE GLOBECOM,* New Orleans, LA, December 2008.

66. X. Long and B. Sikdar, "Wavelet Based Detection of Session Hijacking Attacks in Wireless Networks," *Proceedings of IEEE GLOBECOM,* New Orleans, LA, December 2008.

65. H.-Y. Shen, H. Yang, B. Sikdar and S. Kalyanaraman, "A Distributed System for Cooperative MIMO Transmissions," *Proceedings of IEEE GLOBECOM,* New Orleans, LA, December 2008.

64. A. Seyedi and B. Sikdar, "Modeling and Analysis of Energy Harvesting Nodes in Wireless Sensor Networks," *Proceedings of the Allerton Conference,* Urbana-Champaign, IL, September 2008.

63. A. Seyedi and B. Sikdar, "Modeling and Analysis of Energy Harvesting Nodes in Body Sensor Networks," *Proceedings of the International Workshop on Wearable and Implantable Body Sensor Networks,* Hong Kong, China, June 2008.

62. B. Sikdar, "Medium Access Control in Vehicle to Roadside Networks," *Proceedings of IEEE ICC,* Beijing, China, May 2008.

61. X. Long and B. Sikdar, "A Wavelet Based Long Range Signal Strength Prediction in Wireless Networks," *Proceedings of IEEE ICC,* Beijing, China, May 2008.

60. X. Long and B. Sikdar, "A Real-time Algorithm for Long Range Signal Strength Prediction in Wireless Networks," *Proceedings of IEEE WCNC,* Las Vegas, NV, March 2008.

59. B. Sikdar, "Design and Analysis of a MAC Protocol for Vehicle to Roadside Networks," *Proceedings of IEEE WCNC,* Las Vegas, NV, March 2008.

58. A. Seyedi and B. Sikdar, "Energy Efficient Transmission Strategies for Body Sensor Networks with Energy Harvesting," *Proceedings of CISS,* Princeton, NJ, March 2008.

57. H. Yang, H.-Y. Shen and B. Sikdar, "A MAC Protocol for Cooperative MIMO Transmissions in Sensor Networks," *Proceedings of IEEE GLOBECOM,* Washington, DC, November 2007.

56. X. Long and B. Sikdar, "Wavelet Based Detection of Shadow Fading in Wireless Networks," *Proceedings of IEEE GLOBECOM,* Washington, DC, November 2007.

55. K. Ramachandran and B. Sikdar, "On the Stability of the Malware Free Equilibrium in Cell Phones Networks with Spatial Dynamics," *Proceedings of IEEE ICC,* Glasgow, Scotland, July 2007.

54. H. Yang and B. Sikdar, "Performance Analysis of Polling based TDMA MAC Protocols with Sleep and Wakeup Cycles," *Proceedings of IEEE ICC,* Glasgow, Scotland, July 2007.

53. X. Long and B. Sikdar, "Real Time Detection of Link Failures in Inter Domain Routing," *Proceedings of IEEE ICC,* Glasgow, Scotland, July 2007.

52. K. Ramachandran and B. Sikdar, "Malware Propagation in Networks of Smart Cell Phones with Spatial Dynamics," *Proceedings of IEEE INFOCOM,* minisymposium, Alaska, AK, May 2007.

51. P. Michiardi, K. Ramachandran and B. Sikdar, "Modeling and Analysis of Seed Scheduling Strategies in a BitTorrent Network," *Proceedings of IFIP Networking,* Atlanta, GA, May 2007.

50. H. Yang and B. Sikdar, "Optimal Cluster Heads Selection in LEACH Architecture," *Proceedings of IEEE IPCCC,* New Orleans, LA, April 2007.

49. J. Peng, L. Cheng and B. Sikdar, "A New MAC Protocol for Wireless Packet Networks," *Proceedings of IEEE GLOBECOM,* San Francisco, CA, November 2006.

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