

Brief Curriculum Vitae

Name and Designation: Sudipta Mahapatra, Associate Professor
Department of E & ECE, IIT Kharagpur

Present Address: Department of Electronics and
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Permanent Address: C/O Dr. S. C. Mahapatra
Retd. Prof. of Electrical Engineering
Jagannathvihar, Bhanjavihar, Brahmapur – 760 007
Dist. Ganjam, Orissa, INDIA.
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Date/Place of Birth: 27th February 1969 / Burla, Orissa.

Nationality: Indian **Sex:** Male **Marital Status:** Married

Present Position: Associate Professor, E & ECE Dept., IIT Kharagpur

Areas of Specialization: Parallel and Distributed Processing, Data Compression.

Research Interests: Multimedia Delivery, Video Coding, Distributed Systems, Optical and Wireless Networks.

Academic Record:

| Year | Degree | University/ Institute | % Marks/ CGPA | Class/Rank |
|------|--|--|------------------|--|
| 1997 | Ph. D (Parallel Processing) | I. I. T., Kharagpur | | |
| 1992 | M. Tech. (Computer Engineering) | I. I. T., Kharagpur | 8.7/10 | 1st |
| 1990 | B. Sc. Engineering (Electronics and Telecom.) | U. C. E., Burla Sambalpur University | 84 % | 1st (Hons.) (Institute topper) |
| 1985 | +2 Science | Council of Higher Secondary Education (Orissa) | 94 % | Topped in Orissa |
| 1983 | Class 10 | Board of Secondary Education (Orissa) | 82 % | 1st |

Projects (Submitted/Ongoing/Completed)

| Sl No. | Name of the funding agency | Name of Scheme/ Program/ Area | Project Title/Role | Year of funding | Duration | Amount (Rs.) | Submitted/ Completed/ Ongoing projects |
|--------|----------------------------|--|--|-----------------|----------|------------------|--|
| 1 | ISRO | Respond | Design, implementation and performance evaluation of algorithms for compression of hyper-spectral data products. | 2015 | 2 years | 11, 80, 000 /- | Ongoing |
| 2 | Vodafone | TCoE | Optimal solutions and applications for the next generation wireless Internet. | 2009-2013 | 4 years | 4,600,000/- | Completed |
| 3 | Vodafone | TCoE | Energy Efficient Radio for next generation cellular | 2009-2013 | 4 years | 1,85,00,000/- | Completed |
| 4 | MHRD | Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning, PI: A.K. Ray, Co-PIs: B. Bhattacharya, G. Saha, S. Mahapatra, K. Pathak | | 2009-2013 | 3+years | 5,00,00,000.00/- | Completed |
| 5 | DST | Indo-Italian Research Project | Enabling Technologies for the design and implementation of next generation optical internet prototype based optical packet switching | 2006-2009 | 3 Years | 314, 000 /- | Completed |
| 6 | DST | FTPYS 2001-02 | Design of Systolic Algorithms for the Efficient Compression of Real-Time Data | 2003-2006 | 3 Years | 642, 000 /- | Completed |
| 7 | UISTRF/ DST | UK-India Research Project | Systolic Design and Implementation of Coders for High-Speed Lossless Data Compression | 2001-2003 | 2 Years | 392, 400 /- | Completed |

Research Guidance:

Ph.D.

1. *Vasu K., Vertical Handover and Mobility Management in heterogeneous wireless Internet, 2014.
2. *Bibhudatta Sahu, Dynamic Load Balancing Strategies in Heterogeneous Distributed System, 2013.
3. Sanjay Kumar C. Gowre – Design of all-glass photonic crystal geometry for telecommunication and sensor applications, 2013.
4. *Urmila Bhanja – A Metaheuristics Based Approach For Ideal And Impairment Aware Dynamic Routing and Wavelength Assignment in Lightwave Networks, 2010.
5. *Prasant Kumar Sahu - Studies on Fiber Bragg Grating and Distributed Fiber-Optic sensors, 2009.
6. *Soumitra Debnath - Modelling, Analysis, and Performance Evaluation of Broadband Photonic Networks, 2009.
7. P. M. Khilar - Algorithms for Fault Diagnosis in Wireless Adhoc Networks and Distributed Embedded Systems, 2009.

M.S

1. *Sumit Maheswari, Measurement, modelling and forecasting of wireless Internet traffic, 2012.

3. Ongoing

- Bibhu Prasad Mohanty, Design and implementation of efficient algorithms for low bit-rate video coding.
- *Ashutosh Misra, VLSI implementation of image processing algorithms.
- *Debjyoti Dash, Efficient spectrum allocation strategies in Cognitive Radio networks.
- V. Phani Kumar M., Design and development of optimal strategies for online video streaming over the wireless Internet.
- K. V. Ravi Chandra Verma, Multiview video streaming.
- Tamal Saha, Optimal solutions for the next generation Internet of Things.

* Joint Guidance

INSTITUTE RESPONSIBILITY

Assistant Warden of R. K. Hall of Residence, October 2009 to September 2011.

OTHER PROFESSIONAL RESPONSIBILITIES

1. Acted as a PhD. Thesis Examiner for the School of Physics, University of Hyderabad.
2. Acted as a PhD. Thesis Examiner for Utkal University.
3. Served as Departmental Member, Secretary, Vice Chairman and Chairman of IEEE Kharagpur Section respectively during 2008, 2009, 2010 and 2011.
4. Has acted as a Reviewer for the following International journals:
 - IEE Proc. Computer and Digital Techniques.
 - Journal of Lightwave Technology, IEEE.
 - Journal of Parallel and Distributed Computing, Elsevier.
 - Integration – The VLSI journal, Elsevier.
 - IET Networks

ADMINISTRATIVE RESPONSIBILITIES

1. ERP representative of the Department from 2008 to 2014.
2. Currently, in charge of Departmental Documentation.

PUBLICATIONS:

Patents:

An Energy and QoS Aware Method for Vertical Handover among Heterogeneous Wireless Networks, No. 0402/KOL/ 2012, Dated 05.04.12, published on 14th May, 2014.

Books Published:

- S. C. Mahapatra, Sudipta Mahapatra: Principles of Electromagnetics *published by* Tata McGraw Hill (2011).
- S. C. Mahapatra, Sudipta Mahapatra: Principles of Electromagnetics, Second Edition TMH (2015).

Publications in SCI Journals:

1. Venkata Phani Kumar M, K. C. Ravi Chandra Varma, Sudipta Mahapatra, Pyramid Coding based Rate Control for Variable Bit Rate Video Streaming, **IET Image Processing**, Accepted March, 2016.
2. Venkata Phani Kumar M, K. C. Ravi Chandra Varma, Sudipta Mahapatra, **Multimedia Tools and Applications**, Springer, Nov. 2015.
3. Vasu K, Sudipta Mahapatra, C. S. Kumar, A Comprehensive Framework for Evaluating IPv6 Based Mobility Management Protocols, **Wireless Personal Communications**, Springer, vol. 78, no. 2, Sep. 2014, pp. 943-977.
4. Vasu K, Sumit Maheshwari, Sudipta Mahapatra, C.S. Kumar, An Energy and QoS Aware FUZZY-TOP Vertical Handover Decision Mechanism for Heterogeneous Wireless Networks, **IET Networks**, vol. 2, no. 3, 2013, pp. 103-114.
5. Sanjaykumar Gowre, Sudipta Mahapatra, S. K. Varshney, P. K. Sahu, Dispersion Charecteristics of All-Glass Photonic Crystal Fiber, **OPTIK-International journal for Light and Electron Optics**, vol. 124, no. 18, Sept. 2013, pp. 3730–3733.
6. Sumit Maheshwari, Sudipta Mahapatra, C.S Kumar, Vasu K, A Joint Parametric Prediction Model for Wireless Internet Traffic using Hidden Markov Model, **Springer Wireless Networks**, vol. 1, Pages: 1-15, December 2012.
7. Vasu K, Sumit Maheshwari, Sudipta Mahapatra, C.S. Kumar, QoS Aware Fuzzy Rule Based Vertical Handoff Decision Algorithm Incorporating a New Evaluation Model for Wireless Heterogeneous Networks. **EURASIP Journal for Wireless Communications and Networking** 2012, vol. 2012:322, ISSN 1687-1499, Oct 2012.
8. Dutt, S.K. Varshney, and S. Mahapatra, "Design of tunable couplers using magnetic fluid filled three-core optical fibers," **IEEE Photonics Technology Letters**, vol. 24, pp. 164-166, 2012.

9. Urmila Bhanja, Sudipta Mahapatra, Rajarshi Roy, FWM aware Evolutionary Programming Algorithm for Transparent Optical Networks, **Photonic Network Communication**, *Springer*, DOI 10.1007/s11107-011-0359-2, vol. 23, no.3, 2012, pp.285-299.
10. Urmila Bhanja, Sudipta Mahapatra, Rajarshi Roy, An evolutionary programming algorithm for survivable routing and wavelength assignment in transparent optical networks, **Information Sciences**, *Elsevier*, vol.222, 10th Feb, 2013, pp.634-647.
11. Urmila Bhanja, Sudipta Mahapatra, A metaheuristic approach for optical network optimization problem, **Applied Soft Computing**, *Elsevier*, vol.13, no.2, 2013, pp.981-997.
12. Avik Dutt, Sudipta Mahapatra and Shailendra K. Varshney, Capillary optical fibers: design and applications for attaining a large effective mode area, **Journal of the Optical Society of America B**, vol. 28, no. 6 , June 2011.
13. P. K. Sahu, S. Gowre, S. Mahapatra, OTDR Performance Improvement Using Complementary Correlated Prometheus Orthonormal Sequence, **IET Optoelectronics**, vol. 2, no. 3, June 2008, pp. 128-133.
14. S. Debnath, S. Mahapatra and R. Gangopadhyay, Analysis of an Optical Packet Switch with Partially Shared Buffer and Wavelength Conversion, **IET Communications**, vol. 1, no. 4, Aug. 2007, pp. 810-818.
15. Sudipta Mahapatra and Kuldeep Singh, An FPGA-Based Implementation of Multialphabet Arithmetic Coding, **IEEE Trans. Circuits and Systems-I**, vol. 54, no. 8, Aug.2007, pp. 1678-1687.
16. J. Jytheswar and Sudipta Mahapatra, Efficient FPGA Implementation of DWT and Modified SPIHT for Medical Image Compression, **Journal of Systems Architecture**, *Elsevier*, vol. 53, no. 7, July 2007, pp 369-378.
17. S. Mahapatra, R. N. Mahapatra, Mapping of neural network models onto Systolic Arrays, **Journal of Parallel and Distributed Computing** 60 (*Elsevier*), 2000, pp. 677-689.
18. S. Mahapatra, R. N. Mahapatra, B. N. Chatterji, Mapping of neural network models onto Massively Parallel Hierarchical Computer Systems, **Journal of Systems Architecture** (*EuroMicro*), vol. 45, no. 11, May 1999, pp. 919-929.
19. S. Mahapatra, R. N. Mahapatra, B. N. Chatterji, A parallel formulation of backpropagation learning on distributed memory multiprocessors, **Parallel Comput.** 22 (*Elsevier*), 1997, pp. 1661-1675.
20. Rabi N. Mahapatra, Sudipta Mahapatra, Mapping of neural network models onto two-dimensional processor arrays, **Parallel Comput.** 22 (*Elsevier*), 1996, pp. 1345-1357.
21. R. N. Mahapatra, S. Mahapatra, Modelling the 2-D IFCT algorithm on a multistage network, **Signal Processing** 30 (*Elsevier*), 1993, pp. 235-243.

Other Journal Articles:

22. Bibhudatta Sahoo, Sanjay Kumar Jena, and Sudipta Mahapatra, Simulated Annealing based Heuristic Approach for Dynamic Load Balancing Problem on Heterogeneous Distributed Computing System, *International Journal of Artificial Intelligent System and Machine Learning*, vol.7, no. 2, pp. 65 - 75, March, 2013.
23. Sanjaykumar C. Gowre, Sudipta Mahapatra, and P. K. Sahu, "A modified structure for all-glass photonic bandgap fibers: Dispersion characteristics and confinement loss analysis," *Hindawi's ISRN Optics*, Volume 2013, pp. 1-5.
24. Bibhuprasad Mohanty, Pramod Verma and Sudipta Mahapatra , A high Performance SPIHT based image and video codec for surveillance, *International journal of Signal and Imaging System Engineering (IJSISE)*, Inderscience Publication.
25. Urmila Bhanja, Sudipta Mahapatra, Rajarshi Roy, A novel solution to the DRWA problem in transparent optical networks, *International Journal of computer communication and networks (IJCNC)*, vol. 2, no 2, March 2010, pp.119-130.
26. Urmila Bhanja, Rajarshi Roy, Sudipta Mahapatra, An evolutionary programming algorithm for finding constrained optimal disjoint paths for multihop communication networks, *International Journal of Metaheuristics*, vol.1, no. 2, 2010, pp.132-155.
27. Bibhuprasad Mohanty, Abhishek Singh, Sudipta Mahapatra, A High Performance Modified SPIHT for Scalable Image Compression, *International Journal of Image Processing*, (ISSN: 1985-2304), vol. 5, no. 4, pp. 390-402, October, 2011.
28. P. M. Khilar and S. Mahapatra, Time-Constrained Fault Tolerant X-By-Wire Systems, *International Journal of Computers & Applications*, vol. 31, no. 4, 2009, pp. 230-238.
29. P. M. Khilar and S. Mahapatra, A Novel Hierarchical Clustering Approach For Diagnosing Large-Scale Wireless Adhoc Systems, *International Journal of Computer and Applications*, vol. 31, no.4, 2009, pp. 260-267.
30. P. M. Khilar and S. Mahapatra, A Hierarchical Approach to Fault Diagnosis in Large-Scale Self-Diagnosable Wireless Adhoc Systems, *International Journal of Theoretical and Applied Information Technology*, vol. 3 no. 4, December 2007, pp. 25-44.

National Journals:

1. S. Mahapatra and S. Chinara, A parallel scheme for implementing the multialphabet arithmetic-coding algorithm in high-speed hardware, *Journal of the CSI*, vol. 31, no. 2, June 2001.

B. CONFERENCES:

1. Venkata Phani Kumar M, Ravi K C and Sudipta Mahapatra, A Novel Two Pass Rate Control Scheme for Variable Bit Rate Video Streaming, IEEE International Symposium on Multimedia (IEEE ISM---2015), Miami, USA, Dec. 14-16, 2015.
2. K C Ravi Chandra Varma, Venkata Phani Kumar M, Sudipta Mahapatra, A Low Complexity Block Matching Algorithm for Fast Motion Estimation in High Efficiency Video Coding, 5th National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG), IIT Patna, Dec. 16-19, 2015.
3. Venkata Phani Kumar M, Ravi K C and Sudipta Mahapatra, Design and Implementation of a Dynamic Adaptive Video Streaming System with a Buffer Aware Rate Selection Algorithm," 18th IAPR ICIAP 2015, Genoa, Italy, Sept. 7-11, 2015.
4. Venkata Phani Kumar M, Ravi K C and Sudipta Mahapatra, A Novel Rate Control scheme for Constant Bit Rate Video Streaming, 8th SIGMM/ACM Conference on Mobile Multimedia Communications, MOBIMEDIA-2015, Chengdu, China. May 25-27, 2015.
5. Venkata Phani Kumar M, Sudipta Mahapatra, Kinshuk Bairagi, K Vasu, RCM-BR: An efficient rate control protocol for multimedia delivery in Wireless Internet, **23rd Wireless and Optical Communication Conference (WOCC)**, NJIT, New Jersey, 2014, pp. 1-6.
6. Bibhudatta Sahoo, S.K. Jena and S. Mahapatra, "Load Balancing in Heterogeneous Distributed Computing Systems using Approximation Algorithm," Proc. Intl. Conf. on Parallel and Distributed Proc. Tech. and Appln., PDPTA 2013, Las Vegas, Nevada, USA, July 22-25, 2013, 2 Volumes. CSREA Press 2013.
7. Vasu K, Sudipta Mahapatra, C.S Kumar,"An Analytical Framework for EvaluatingMIPv6 Protocols Applying Transport Engineering Concepts", **ACM MSWiM 2012**, Vol. 1, Pages 53-60, Paphos, Cyprus.
8. Vasu K, Sumit Maheshwari, Sudipta Mahapatra, C. S. Kumar, "QoS Aware Fuzzy Rule Based Vertical Handoff Decision Algorithm for Wireless Heterogeneous Networks", **IEEE NCC 2011**, pp. 371-375, Jan., 2011, IISc, Bangalore, India. (20 Citations).
9. Sumit Maheshwari, Vasu K, Sudipta Mahapatra, C. S. Kumar, "A Joint-Parametric Realistic Traffic Model for Wireless Internet using Hidden Markov Model", IEEE CSQRWT 2011, July, 2011, HIT, Harbin, China. (best paper award).
10. Vasu K, Sudipta Mahapatra, C.S Kumar, "MIPv6 Protocols: A Survey and Comparative Analysis", CoNeCo 2012, Vol. 4, pp. 73-93, 2012. CSIT-CSCP AIRCC, Coimbatore, India.
11. Vasu K, Sudipta Mahapatra, C.S Kumar, "Bulk Binding Update Procedure for PMIPv6 Based Intelligent Transportation Systems", WiMo 2012, Vol. 4, pp. 207-223, 2012. CSIT-CSCP AIRCC, Coimbatore, India.

12. Sumit Maheshwari, Vasu K, C. S. Kumar, Sudipta Mahapatra, "Measurement and Comparative Analysis of UDP Traffic over Wireless Networks", ICWN 2011, July, 2011, Las Vegas, USA.
13. Sumit Maheshwari, Vasu K, C. S. Kumar, Sudipta Mahapatra, "Measurement and Analysis of UDP Traffic over Wi-Fi and GPRS", ICCCD 2010, Dec, 2010, IIT Kharagpur, India
14. An evolutionary programming algorithm for the RWA problem in survivable optical network, 19-21, Feb 2010, IIT, Roorkee.
15. P.M.Khilar, J.K.Singh and S.Mahapatra, "Design and Evaluation of a Failure Detection Algorithm for Large Scale Ad-hoc Networks Using Cluster Based Approach", In Proceedings of 2008, International Conference, Dec 17-20, 2008, pp. 153-158.\
16. Bibhudatta Sahoo, Sudipta Mahapatra, Sanjay Kumar Jena, A Genetic Algorithm Based Dynamic Load Balancing Scheme for Heterogeneous Distributed Systems Intl. Conf. on Parallel and Distributed Processing Techniques and Applications (PDPTA'08), Las Vegas, July 14-17, 2008.
17. P.M.Khilar and S.Mahapatra, "A Fault Diagnosis Algorithm for Wireless Sensor Networks", The 19th IASTED International Conference on Parallel and Distributed Systems, Cambridge, Massachusetts, USA, Nov. 19-21, 2007, pp. 443-447.
18. P. M. Khilar and S. Mahapatra, Heartbeat based fault diagnosis in Mobile Adhoc Networks, Proc. IASTED Conf. on ACST, Phuket, Thailand, April 2-4, 2007.
19. P.M.Khilar and S.Mahapatra, "Intermittent Fault Diagnosis in Wireless Sensor Network," In proc. of 10th International Conf. on Information Technology, NIT, Rourkela, India, Dec-2007 pp. 145-147.
20. P.M.Khilar and S.Mahapatra, "A Distributed Diagnosis Approach to Fault Tolerant Multi-Rate Real-Time Embedded Systems" In proc. of 10th International Conf. on Information Technology, NIT Rourkela, India, Dec 2007, pp. 167-172.
21. P.M.Khilar and S.Mahapatra, "A Dynamic Distributed Diagnosis Algorithm for an Arbitrary Network Topology With Unreliable Nodes and Links" In proc. of ADCOM, 2007, IIT Guwahati, India, 18-21, Dec 2007, pp.125-130.
22. S. Debnath, V. Kamal, R. Gangopadhyay, S. Mahapatra, and P. Castoldi, "A comparison between path and span protection in JET based OBS network," Proc. International Conference on Optical Internet and Next Generation Network (COIN-NGNCON'2006), Jeju, Korea, Jul. 2006.
23. P. M. Khilar, and S. Mahapatra, "Distributed Diagnosis in Dynamic Fault Environment for Not-Completely Connected Networks" IEEE INDICON Conference, New Delhi, India, Sept., 2006.
24. P.K.Sahu, S. Mahapatra, J.C. Biswas, "Analysis of Fibre Bragg Grating Applications in Telecommunication Networks", In proceeding Intl. Conf. Photonics-2006, December 13 – 16, 2006, Hyderabad, India.

25. P.K.Sahu, S.C. Gowre, S. Mahapatra, J.C. Biswas, "Design and simulation of programmable delay using a Fibre Bragg Grating (FBG) array for high speed optical networks and an error model for a CFBG based Optical device," In proceeding Intl. Conf. CODEC- 2006, Dec18-20, 2006, Kolkata, India.
26. P.K.Sahu, S. Gowre, S. Mahapatra, J.C. Biswas, "Temperature Insensitive Fibre Bragg Grating Sensor for Smart Structure Applications", In proceeding PCEA-IFTOMM Intl. Conf., July11-13, 2006, Nagpur, India.
27. P.K.Sahu, Sanjay Gowre, S.Mahapatra & J.C.Biswas, "Numerical modeling and simulation of Fibre –Bragg Grating based devices for all-optical communication network", Proceeding of the Intl. conference WOCN-2006, Bangalore, April 11-13, 2006, India.
28. Sudipta Mahapatra, and M.Venkata Krishna Reddy, An integrated approach to lossless Image Compression, Proc. National Level Seminar on Soft Computing Techniques for Engineering Applications (SCT-06), N.I.T., Rourkela, 24-26 March 2006.
29. S. Debnath, V. Kamal, S. Kumar, Y. C. Kim, S. Mahapatra, and R. Gangopadhyay, "Impact of self-similarity of aggregated burst on the performance of OBS networks," Proc. 12th National Conference on Communications (NCC'2006), Delhi, India, pp. 373-377, Jan. 2006.
30. S. Debnath, S. Mahapatra, and R. Gangopadhyay, "Use of Shared Buffering and Wavelength Conversion for Contention Resolution in an Optical Packet Switch Architecture," IEEE INDICON Conference, Chennai, India, Dec. 2005.
31. P. M. Khilar, and S. Mahapatra, "Distributed Diagnosis in Dynamic Fault Environment for Arbitrary Network Topologies," IEEE INDICON Conference, Chennai, India, Dec. 2005.
32. Prasant Kumar Sahu, Sanjay Kumar C. Gowre, S. Mahapatra, and J. C. Biswas, "Characterization of Fibre Bragg grating response in a all-optical network", Proc. IEEE Conf. INSIGHT-2005, NIT Calicut, Oct.-22, 2005, pp 37-39.
33. S. Mahapatra and K. Singh, A parallel scheme for implementing multialphabet arithmetic coding in high-speed programmable hardware, Proc. IEEE Intl. Conf. on Information Technology ITCC - 2005, Las Vegas, April 4-6, 2005, pp. 79-84.
34. S. Debnath, V. Kamal, S. Mahapatra and R. Gangopadhyay, Impact of Traffic Shaping on Photonic Packet Switch with Multiple Groups of Partially Shared Buffer, National Conference on Communications, NCC-05, IIT, Kharagpur, Jan. 29-30, 2005.
35. V. Kamal, S. Debnath, S. Mahapatra and R. Gangopadhyay, Effect of Scheduling on Performance of a Photonic Packet Switch with Multiple Groups of Partially Shared Buffer and Wavelength Conversion, Photonics-2004, Cochin, Dec. 9-11 2004.
36. N. K. Kamila, S. Mahapatra and S. Nanda, Modified Zernike Moments: A feature extraction technique for distortion invariant character recognition, Proc. National Conf. on Recent Advances in Power, Signal Processing and Control, NIT, Rourkela, Nov. 16-17, 2004.

37. Riad Stefo, Jose Luis Nunez, Claudia Feregrino, Sudipta Mahapatra and Simon Jones, FPGA-based modelling unit for high speed lossless arithmetic coding, Proc. 11th Intl. Conf. FPL2001, Belfast, Northern Ireland, August, 2001, pp. 643-647 (Lecture notes in Comp. Sc. Series, Springer Verlag).
38. S. Mahapatra, J. Nunez, C. Feregrino-Urbe and S. Jones, Parallel Implementation of a Multialphabet Arithmetic Coding Algorithm, IEE Colloquium on Data Compression: Methods and Implementations, 23rd November 1999, IEE Savoy Place, LONDON, U.K..
39. S. Jones, J. Nunez, C. Feregrino-Urbe, S. Mahapatra, Gbit/s Lossless Data Compression Systems, IEE Colloquium Data Compression : Methods and Implementations, 23rd November 1999, IEE Savoy Place, LONDON, U.K..
40. Sudipta Mahapatra, Mapping of neural network models onto Massively Parallel Hierarchical Computer Systems, Proc. IEEE Intl. Conf. On High Performance Computing, Bangalore, December 18-21, 1997, pp. 42-47.
41. Sudipta Mahapatra and Ananga Mohanty, Imparting Fault Tolerance to high speed communication networks: A Brief Review, Presented at the National Seminar on Business Process Redesign using Information Technology, U.C.E. Burla, Orissa, September 4-5, 1998.
42. S. Mahapatra and R. N. Mahapatra, Mapping of back-propagation learning onto distributed memory multiprocessors, Proc. IEEE Intl. Conf. On Algorithms and Architectures for Parallel Processing, Brisbane, Australia, Apr. 19-21, 1995, pp. 217-226.
43. S. Mahapatra, Performance analysis and comparison of Fault Tolerant Multistage Interconnection Networks , Presented in IEEE Conf. On Applications of Parallel and Distributed Processing, I.I.T. Kharagpur, Jan. 15-16, 1993.

Technical Reports:

1. R. N. Mahapatra and S. Mahapatra, Modelling Lee's FCT algorithm on multiprocessors, Tech. Rep. #EC9210-1, I. I. T. Kharagpur, 1992.