

PUBLICATIONS

Summary

Category	International Level	Local Level
(A) Journal Papers	34	29
(B) Conference Papers	63	24
(C) Books, monographs and chapters	6	12
(D) Others (Technical Reports)	-	4

PUBLICATION LISTING

A) JOURNAL PAPERS (63) (in last three years, *i.e.*, after Jan 2006: 16: 3: in premium journals + 11 (in A(ii)) + 2 (in in A(iii)))

A.i) PAPERS IN PREMIUM JOURNALS: (7 published + 1: recently accepted: available online; print version in press = 8)

1. Narendra S. Chaudhari, X. Wang, "Language Structure using Fuzzy Similarity," Accepted for publication in *IEEE Transactions on Fuzzy Systems* (Digital Object Identifier 10.1109/TFUZZ.2009.2020155; full text – pdf - available online on 14 April 2009).
2. J. Chen, N.S. Chaudhari, "Cascaded Bidirectional Recurrent Neural Networks for Protein Secondary Structures," *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, Vol. 4, No. 4, pp. 572-582, (Oct.-Dec. 2007).
3. D. Wang, N.S. Chaudhari, "A Fast modified constructive-covering algorithm for multi-layer Binary Neural Networks," *Neurocomputing*, Vol 70, Nos. 1-3, pp. 445-461, (Dec. 2006).
4. J.C. Patra, E.L.Ang, N.S. Chaudhari, A.Das, "Neural Network based Smart Sensor framework Operating in a Harsh Environment," *EURASIP Journal on Applied Signal Processing*, 2005 (*EURASIP JASP*), Vol. 4, pp. 558-574, (2005).
5. D. Wang, N.S. Chaudhari, "An Approach for Construction of Boolean Neural Networks based on Geometrical Expansion," *Neurocomputing*, vol. 57, no. 4, pp. 455-461, (March 2004).
6. M. Chandwani and N.S. Chaudhari, "Knowledge representation using Fuzzy deduction graphs". *IEEE Trans. On System, Man and Cybernetics (IEEE-SMC)* vol. 26, pp. 848-854, (1996).
7. M. Chandwani and N. S. Chaudhari, "Formulation and analysis of parallel context free recognition and parsing on PRAM Model," *Parallel Computing*, vol. 22, pp.845-868, (1996).
8. A. Jain and N.S. Chaudhari, "Efficient parallel recognition of context free languages," *Parallel Computing*, vol. 20, pp. 1303-1321, (1994).

A.ii) INTERNATIONAL LEVEL: (34 = 26 + 8^{\$})

(\$: includes 8 papers in Premium journal list above)

(after Jan 2006: 11 + 3: in premium journals (in A(i)) : total 14)

9. Edmond Prakash, G. Brindle, K. Jones, Z. Suiping, Narendra S. Chaudhari, K. Wong, "Advances in Games Technology: Software, Models and Intelligence," (37 pages; in press), To appear in *Simulation & Gaming: An Interdisciplinary Journal of Theory, Practice and Research* (<http://www.unice.fr/sg/about/index.html>) (13 March, 2009).
10. Yilin Kang, and Narendra S. Chaudhari, "A Comparative Analysis of Classification with Unlabelled Data using Naïve Bayesian Approach," *International Journal of Computer Science and System Analysis (IJCSSA)*, Vol. 2 No. 2, pp. 169-172 (July-Dec. 2008).
11. Narendra S. Chaudhari, and Aruna Tiwari, "Multi-Category Binary Neural Networks: A Comparative Study," *International Journal of Computer Science and System Analysis (IJCSSA)*, Vol. 2 No. 2, pp. 133-144 (July-Dec. 2008).
12. Minh Duc Le, Amandeep Singh Sidhu, and Narendra S. Chaudhari, "Hierarchical pathfinding and AI based learning approach for Strategy Game Design," *International Journal of Computer*

- Games Technology*, vol. 2008, Article ID 873913, doi:10.1155/2008/873913 11 pages (direct link:<http://www.hindawi.com/GetPDF.aspx?doi=10.1155/2008/873913>) (2008).
13. Prasad P. Chaudhari, Narendra S. Chaudhari, "Devnagri Handwritten Numeral Character Recognition," *International Journal of Computer, Mathematical Sciences and Applications*, Vol. 1, No. 2, pp. 341-347 (Dec 2008).
 14. Prasad P. Chaudhari, Narendra S. Chaudhari, "Handwritten Numeral Character Recognition Using Sector based Approach," *International Journal of Computer, Mathematical Sciences and Applications*, Vol. 1, No. 2, pp. 349-353 (Dec 2008).
 15. Tng C. H. John, Edmond C. Prakash, and Narendra S. Chaudhari, "Strategic Team AI Path Plans: Probabilistic Pathfinding," *International Journal of Computer Games Technology*, vol. 2008, Article ID 834616, 6 pages, doi:10.1155/2008/834616 (direct link: <http://www.hindawi.com/GetPDF.aspx?doi=10.1155/2008/834616>) (2008).
 16. S. Jain, N.S. Chaudhari, "An Incremental Algorithm for learning DFA from characteristic sample," *International Journal of Computational Intelligence Research (IJCIR)*, Vol. 3, No. 4, pp. 297-312 (Online: http://www.ripublication.com/ijcirv3/ijcirv3n4_3.pdf) (Dec 2007).
 17. A. Tiwari, and N.S. Chaudhari, "Design of output codes for Fast Covering Learning using basic Decomposition Techniques," *Journal of Computer Science* (Science Publications, NY, USA), Vol. 2, No. 7, pp. 565-571 (July 2006).
 18. M.U. Kharat, and N.S. Chaudhari, "Efficient Caching Proxy Server parameters: An Integrated Approach," *Information Technology Journal*, Vol. 5, No. 2, pp. 300-304 (June 2006).
 19. J. Chen, and N.S. Chaudhari, "Bidirectional Segmented-Memory Recurrent Neural Network for Protein Secondary Structure Prediction", *Soft Computing*, Springer-Verlag, Berlin, Germany, vol. 10, pp. 315-324, 2006.
 20. M.U. Kharat, and N.S. Chaudhari, "Parameter Selection Schemes for Web Proxy Servers and their Performance Evaluation," *Information Technology Journal*, Vol. 4, No. 4, pp. 416-419, (Aug. 2005).
 21. U. Singh, A.K. Ramani, N.S. Chaudhari, "On The Analysis and Design of Enhanced Firewall for Intranet Security," *Journal of Computer Science*, New York, USA., pp. 290-295, (April 2005).
 22. A. Pathak, and N.S. Chaudhari, "Medium is the Message: Web-based Lecture Presentations in Distance Education", *Asian Journal of Distance Education*, Vol. 3, No. 1 (2005).
 23. U.K. Singh, A.K. Ramani, N.S. Chaudhari, V. Gupta, "Increasing Effectiveness of IDS to improve security in intranet," *American Journal of Applied Sciences*, pp. 1032-1035, (2005).
 24. J.C. Patra, E.L. Ang, A. Das, N.S. Chaudhari, "Auto calibration/compensation nonlinear influence of environmental parameters of sensors using neural networks," *The Instrumentation, Systems, and Automation Society - ISA Transactions (USA)*, Vol. 44, pp. 165-176, (2005).
 25. D. Wang, N.S. Chaudhari, "Binary Neural Network Training Algorithms based on Linear Sequential Learning," *International Journal of Neural Systems*, vol. 13, no. 5, pp. 333-351, (Sept. 2003).
 26. R. Wankar, N.S. Chaudhari, "Parallel Algorithms for symmetric positive definite systems of equations," *Journal of Information Science and Technology: The official Journal of Chartered Computer Professionals of India*, vol. 4, no. 3, pp. 189-207 (1996).
 27. M. Sharma, N.S. Chaudhari, "An LCP based interior point algorithm for convex quadratic programming," *International Journal of Management and Systems (IJOMAS)*, vol. 11, pp. 341-352, (1995).
 28. A. Jain, N.S. Chaudhari, "Parallel parsing on processors array with reconfigurable bus system," *International Journal of Management and Systems (IJOMAS)*, vol. 11, pp. 153-168, (1995).
 29. M. Chandwani, N.S. Chaudhari, "Parallel CKY algorithm for context free recognition and parsing," *Journal of Information Science and Technology: The official Journal of Chartered Computer Professionals of India (JIST)*, vol. 3, pp. 83-87 (1995).
 30. M. Chandwani, N.S. Chaudhari, "A new parallel framework for context free recognition," *International Journal of Management and Systems (IJOMAS)*, vol. 11, pp. 39-52, (1995).
 31. M. Chandwani, N.S. Chaudhari, "Decision making as a Fuzzy logic process," *International Journal of Management and Systems (IJOMAS)*, vol. 9, pp. 105-116, (1993).
 32. N.S. Chaudhari, D.B. Phatak, "On the isomorphism completeness of bipartite and tripartite graphs," *Journal of Combinatorics, Information and System Sciences (JCISS)*, vol. 14, pp. 33-45, (1989).

33. N.S. Chaudhari, D.B. Phatak, "A new approach for graph isomorphism," *Journal of Combinatorics, Information and System Sciences (JCISS)*, vol. 13, pp. 1-19, (1988).
34. N.S. Chaudhari, D.B. Phatak, "On characterizing a clique by paths in a digraph," *Journal of Combinatorics, Information and System Sciences (JCISS)*, vol. 11, pp. 129-137, (1986).

A.iii) LOCAL JOURNAL PAPERS: (29)

35. S. Jain, N.S. Chaudhari, "Learning DFA from characteristic sample using prefix tree automaton," *Computer Science and Informatics: Journal of Computer Society of India*, Vol. 36, No. 3, pp. 50-59 (July-Sept. 2006).
36. A. Tiwari, and N.S. Chaudhari, "Design of output codes for Fast Covering Learning using basic Decomposition Techniques," *Varahamihir Journal of Computer Science and Information Sciences*, (Sandipani Academy, Ujjain, India), pp. 239-268 (May 2006).
37. U.K. Singh, N.S. Chaudhari, A.K. Ramani, S.S. Chandel, "The Information Threats and Security Characteristic in Information Systems," *Vikram Mathematical Journal: Journal of Vikram University, Ujjain (India)*, , pp. 70-81, (2004)
38. X. Yi, N.S. Chaudhari, "Rule Extraction Frameworks using Neural Networks and Rough Sets," *International Journal of System Modeling and Simulation (IJSMS)*, 2004, vol. 2, no. 2 (July 2004).
39. S. Ferdinand, N.S. Chaudhari, S. See, U. Singh, "Performance of JPEG Compression Standard on SPARC Architecture," *Varahamihir Journal of Mathematical Sciences*, vol. 4 (March 2004).
40. X. Wang, N.S. Chaudhari, "Recurrent Networks for Recognition of Sequence Patterns," *International Journal of System Modeling and Simulation (IJSMS)*, 2004, vol. 2, no. (Special issue on Advancements in Algorithms), pp. 1-7 (Jan. 2004).
41. N.S. Chaudhari, T.J. Tan, U. Singh, "Modeling using Neural Nets based on Expand-and-Truncate Learning (ETL)," *Varahamihir Journal of Mathematical Sciences*, vol. 3 (2003).
42. R. Wankar, E. Rainald, N.S. Chaudhari, "Design and Implementation of parallel algorithm for solving a special linear system using MPI and ShMEM," *IETE Journal of Research*, vol. 48, no. 1, pp. 15 – 22, (2002).
43. U.K. Singh, N. Mazumdar, N.S. Chaudhari, "Applications of Bezier curves in computer aided Geometric Design," *Varahamihir Journal of Mathematical Sciences*, vol. 1, no. 1, pp. 73-79, (Jan. 2001).
44. U.K. Singh, N.S. Chaudhari, A.K. Ramani, S.S. Chandel, "Security Issues and Practices on the Intranet," *Varahamihir Journal of Mathematical Sciences*, vol. 1, no. 2, pp. 217-226 (July 2001).
45. B.V. Pawar, N.S. Chaudhari, "Marathi language Grammar parsing using Tomita's approach", *Indian Linguistics - Journal of Linguistic Society of India*, vol. 61, pp. 69-76 (2000).
46. M. Sharma, N.S. Chaudhari, "PC Based Implementation of Karmarkar's Interior point Method", Bhaskaracharya Research Institute (BRI)'s *Journal of Advances in Science and Technology* (2000).
47. B.V. Pawar, N.S. Chaudhari, "Grammar formalism for Marathi language and its parsing using Earley's approach", Bhaskaracharya Research Institute (BRI)'s *Journal of Advances in Science and Technology*, pp. 39-68, (Dec. 1998).
48. S. Gupta, N.S. Chaudhari, "Solution of Linear Programming problems of Management by Primal-Dual Infeasible-interior Point Algorithm," *Pranjana: The Journal of Management Awareness (ISSN 0971-9997)*, vol. 2, No. 1 (Jan.-June 1998).
49. S. Gupta, N.S. Chaudhari, "A primal-dual formulation of general linear programming problem for Karmarkar's approach," *The Journal of Indian Academy of Mathematics*, vol. 19, No. 2, (Dec. 1997).
50. D.K. Mishra, M.C. Shrivastava, N.S. Chaudhari, "New dynamic test methods for determination of nonlinearity and effective resolution of A/D converters," The Institute of Electronics and Telecommunication Engineers (IETE) *IETE Journal of Research (J-IETE)*, vol. 43, no. 6, pp. 403-409, (Nov. -Dec. 1997).
51. D.K. Mishra, M.C. Shrivastava, N.S. Chaudhari, "ADC's effective number of bits determination by combination of Histogram and least square error minimization techniques," The Institute of Electronics and Telecommunication Engineers (IETE) *IETE Journal of Research (J-IETE)*, vol. 43, no. 4, pp. 327-332 (July-Aug. 1997).

52. D.K. Mishra, N.S. Chaudhari, M.C. Shrivastava, "Dynamic testing of an ADC by least square error minimization in Histogram technique," *Institution of Engineers (India) Journal: Electrical Engineering Division (IE(I) Journal - EE)*. vol.78, pp. 31-35, (1997).
53. B.V. Pawar, and N.S. Chaudhari, "Comparison of Tomita's and CKY's parsing algorithms using CFG formalism for simple Marathi sentences," *Bhaskaracharya Research Institute (BRI)'s Journal of Advances in Science and Technology*,. vol. 1, pp. 20-35, (1997).
54. D.K. Mishra, N.S. Chaudhari, M.C. Shrivastava, "Determination of effective bits of an ADC for application mode input by extending sine wave curve fitting technique," (spl. issue of) *Journal of Instruments Society of India*, vol. 26, pp. 303-307, (1996).
55. D.K. Mishra, N.S. Chaudhari, M.C. Shrivastava, "New proposed method for dynamic testing of A/D converters," (spl. issue of) *Journal of Instruments Society of India*, vol. 26, pp. 297-302, (1996).
56. S. Yewale, N.S. Chaudhari, "Fourier Descriptors for Counter Representation," *Indian Cartographer*, pp. 94-97, (1995).
57. A. Jain, N.S. Chaudhari, "An Efficient parallel bottom up parsing algorithm for non-LR grammars," *Institution of Engineers (India) Journal: Computer Engineering Division (IE(I) Journal - CP)*. vol.76, pp. 1-6, (1995).
58. M. Chandwani, N.S. Chaudhari, "Control algorithms for optimal derivation strategy in Fuzzy rule-based systems," *The Institute of Electronics and Telecommunication Engineers (IETE) IETE Journal of Research (J-IETE)*, vol. 39, no. 4, pp. 217-233, (July-Aug. 1993).
59. M. Chandwani, N.S. Chaudhari, "Efficient parallel CKY parsing algorithm for Context free languages," *Institution of Engineers (India) Journal: Computer Engineering Division (IE(I) Journal - CP)*. vol.74, pp. 23-27, (1993). (Note: This paper has been awarded *Certificate of Merit* by *Institution of Engineers (India)*).
60. N. Narsinghani, N.S. Chaudhari, "Performance of Hamming neural network for recognition of alphanumeric characters," *Computer Science and Informatics* (Official Journal of Computer Society of India), vol. 21, no. 1, pp. 9-16, (1991).
61. N.S. Chaudhari, N.L. Sarda, D.B. Phatak, "An invariant for a subspace of finite dimensional vector space and automorphism partition of a real symmetric matrix," *Indian Journal of Pure and Applied Mathematics (IJPAM)*, vol. 19, pp. 217-249 (1988).
62. N.S. Chaudhari, , D.B. Phatak, N.L. Sarda, "Inversion of Cauchy matrices". *Computer Science and Informatics* (Official Journal of Computer Society of India), vol. 17, No. 1, pp. 1-4, (1987).
63. N.S. Chaudhari, N.L. Sarda, D.B. Phatak, "A Note on the property of an adjoint of the adjacency matrix of strongly regular graphs," *Indian Journal of Pure and Applied Mathematics (IJPAM)*, vol. 17, pp. 871-874 (1986).

B) CONFERENCE PAPERS (87) (after Jan 2006: total 20: 15: International level (in B(i)) + 5: local level (in B(ii)))

B.i) INTERNATIONAL: (63)

64. Minc Duc Le, Narendra S. Chaudhari, Kim Leng Koh, and Abhijit Ray, "Intelligent Path Finding in Urban Terrain Environment Using BSP Techniques," *The Fourth IEEE Conference on Industrial Electronics and Applications (ICIEA 2009)*, Xi'an, P.R. China (25-27 May, 2009).
65. N.S. Chaudhari, A. Purohit, A. Tiwari, "A Multiclass Classifier using Genetic Programming," *10th International Conference on Control, Automation, Robotics and Vision, ICARCV 2008 (IEEE)*, Hanoi, Vietnam (17-20 Dec. 2008).
66. N.S. Chaudhari, A. Tiwari, and J. Thomas, "Performance Evaluation of SVM Based Semi-supervised Classification Algorithm," *10th International Conference on Control, Automation, Robotics and Vision, ICARCV 2008 (IEEE)*, Hanoi, Vietnam (17-20 Dec. 2008).
67. G.L. Prajapati, N.S. Chaudhari, and M. Chandwani, "An Incremental Model for Learning Context Free Grammars from Positive Structural Examples," *5th Hellenic Conference on Artificial Intelligence, SETN'08*, Syros, Greece. *Proceedings in Artificial Intelligence: Theories*,

- Models, and Applications*, Lecture Notes on Artificial Intelligence (LNAI), Springer Verlag, Berlin, Vol. 5138, pp. 250-262 DOI: 10.1007/978-3-540-87881-0 (2-4 Oct. 2008).
68. G.L. Prajapati, N.S. Chaudhari, and M. Chandwani, "On Learning Context Free Grammars using Skeletons," First International Conference on Emerging Trends in Engineering and Technology, 2008, ICETET'08 (IEEE), Nagpur, India. ISBN: 978-0-7695-3267-7. DOI 10.1109/ICETET.2008.167; pages 1150-1155 (16-18 July, 2008).
 69. S.P. Simon, and N.S. Chaudhari, "Ant Colony Models: An Application to Traveling Salesman Problem," *International Conference on Soft computing and Intelligent System (ICSCIS-07)*, Jabalpur, India (27-29 Dec. 2007).
 70. N.S. Chaudhari, and A. Tiwari, "On the construction of multiclass binary neural networks," 3rd Indian International Conference on Artificial Intelligence (*IICAI-07*), Pune, India. Proceedings pp. 372-388 (17-19 Dec. 2007).
 71. G. Prajapati, N.S. Chaudhari, and M. Chandwani, "An effective model for Context Free Grammar Inference," 3rd Indian International Conference on Artificial Intelligence (*IICAI-07*), Pune, India. Proceedings pp. 24-42 (17-19 Dec. 2007).
 72. M.D. Le, A. Sidhu, and N.S. Chaudhari, "Hierarchical pathfinding and AI based learning approach in strategy game design," Third International Conference on Games Research and Development 2007 (*CyberGames 2007*) Manchester, U.K. (10-11 Sept, 2007).
 73. N.S. Chaudhari, Y. S. Ong, and V. Trivedi, "Computational Capabilities of Soft-Computing Frameworks: An Overview," Ninth International Conference on Control, Automation, Robotics and Vision (*ICARCV 2006*), Singapore, Proceedings pp. 1341-1346, (06-08 Dec. 2006).
 74. T.C.H. John, E.C. Prakash, and N.S. Chaudhari, "Team AI: probabilistic pathfinding," *ACM International Conference Proceeding Series*; Vol. 223: Proceedings of the 2006 international conference on Game research and development, Perth, Australia, pp. 191-198, (04-06 Dec. 2006).
 75. N.S. Chaudhari, N. Dagdee, and J. M. Er, "Hard-limiter neuron based Turing Machine simulation with constant time read/write operation," International Joint Conference on Neural Networks (*IJCNN 2006*), Vancouver, Canada, Proceedings pp. 2372-2376 (16-22 July, 2006).
 76. A. Singh, N.S. Chaudhari, G. M. Goh, "Hierarchical reinforcement learning model for military simulations," International Joint Conference on Neural Networks (*IJCNN 2006*), Vancouver, Canada, Proceedings pp. 4879-4883 (16-22 July, 2006).
 77. X. Wang, N.S. Chaudhari, "Alignment based similarity measure for grammar learning," 2006 IEEE International Conference on Fuzzy Systems (*Fuzz-IEEE 2006*), Vancouver, Canada, Proceedings pp. 9034-9041 (16-22 July, 2006).
 78. J. Chen, N.S. Chaudhari, "Statistical Analysis of Long-Range Interactions in Proteins," 2006 International Conference on Bioinformatics & Computational Biology, *BIOCOMP'06*, Las Vegas, Nevada, USA, CSREA Press: ISBN 1-60132-002-7, Proceedings pp. 296-302 (June 26-29, 2006).
 79. P. Chaudhari, and N.S. Chaudhari, "Hybrid approach for handwritten numeral character recognition," In, Proceedings, International Conference on Cognition and Recognition (*ICCR 2005*), Mysore, India, (Website : <http://www.cogrec.org>), pp. 532-537, (Full paper available online on website: http://www.studentprogress.com/appln/colleges/cogrec/Papers/F_16.pdf), (22-23 Dec. 2005).
 80. N.S. Chaudhari, A. Tiwari, "An Approach for the construction of Binary Neural Networks for Multiclass Problems," Third International Conference on Computational Intelligence, Robotics, and Autonomous Systems (*CIRAS 2005*), NUS, Singapore (ISBN 981-05-4674-2) (13 Dec-16 Dec, 2005).
 81. N.S. Chaudhari, Y.Xu, "Hybrid Rule Extraction Framework using Self-Organizing Maps (SOM) and Rough Sets," Third International Conference on Computational Intelligence, Robotics, and Autonomous Systems (*CIRAS 2005*), NUS, Singapore (ISBN 981-05-4674-2) (13 Dec-16 Dec, 2005).
 82. C.B. Han, N.S. Chaudhari, J.C. Patra, "Design of a Virtual Shopping Mall: Observations & Analysis," International Conference on Cyberworlds (*Cyberworlds 2005*), NTU, Singapore, (Ed. by: A. Sourin), Published by IEEE, USA (ISBN 0-7695-2378-1) Proceedings pp. 345-348 (13 Dec-16 Dec, 2005).
 83. J. Chen, N.S. Chaudhari, "Protein Secondary Structure Prediction with bidirectional LSTM networks," Post-Conference Workshop on Computational Intelligence Approaches for the

- Analysis of Bio-data (CI-BIO) International Joint Conference on Neural Networks (IJCNN 2005), Montreal, Canada, (05th August, 2005).
84. D. Wang, N.S. Chaudhari, J. Patra, "Fast Constructive-Covering Approach for Neural Networks," International Joint Conference on Neural Networks (IJCNN 2005), Montreal, Canada, pp. 2167-2172 (31July-04th August, 2005).
 85. J. Chen, N.S. Chaudhari, "Protein Secondary Structure Prediction with a Hybrid RNN/HMM System," International Joint Conference on Neural Networks (IJCNN 2005), Montreal, Canada, pp. 538-541 (31July-04th August, 2005).
 86. J. C. Patra, W. B. Poh, N. S. Chaudhari, and A. Das, "Nonlinear Channel Equalization with QAM Signal Using Chebyshev Artificial Neural Network," International Joint Conference on Neural Networks (IJCNN 2005), Montreal, Canada, pp. 3214-3219 (31July-04th August, 2005).
 87. J. C. Patra, L. Wang, E. Luang Ang, and N. S. Chaudhari, "Neural Network based Analysis of DNA Microarray Data," International Joint Conference on Neural Networks (IJCNN 2005), Montreal, Canada, pp. 503-508 (31July-04th August, 2005).
 88. D. Wang, N.S. Chaudhari, "A Fast Constructive-Covering Algorithm for Neural Network Construction," International Symposium on Computational Intelligence and Industrial Applications (*ISCIIA2004*) Haikou, China, (20-24, Dec 2004).
 89. J. Abraham, N.S. Chaudhari, E.C.Prakash, "XML Query Algebra Operators and Strategies for their implementation," *IEEE TENCON 2004* (international technical conference sponsored by IEEE Region 10), Lotus Hotel, Pang Suan Kaew, Chiang Mai, Thailand (28-30 Nov 2004).
 90. C.H. Yee, E.C.Prakash, N.S. Chaudhari, "Game AI: Artificial Intelligence for 3D path finding," *IEEE TENCON 2004* (international technical conference sponsored by IEEE Region 10), Lotus Hotel, Pang Suan Kaew, Chiang Mai, Thailand (28-30 Nov 2004).
 91. X. Yi, N.S. Chaudhari, "Rule Extraction Framework Using Rough Sets and Neural Networks," *11th International Conference on Neural Information Processing (ICONIP 2004)*, Asia Pacific Neural Network Association (Japan) (22-25 Nov. 2004). Also in, *Lecture Notes in Computer Science*, Vol. 3316, pp. 1002-1007, Springer Verlag, Berlin (ISBN: 3-540-23931-6), 2004.
 92. X. Wang, N.S. Chaudhari, "Recurrent Neural Networks for learning mixed k-th order Markov Chains," *11th International Conference on Neural Information Processing (ICONIP 2004)* Asia Pacific Neural Network Association (Japan) (22-25 Nov. 2004). Also in, *Lecture Notes in Computer Science*, Vol. 3316, pp. 477-482, Springer Verlag, Berlin (ISBN: 3-540-23931-6), 2004.
 93. T.V. Nguyen, J.C. Patra, N.S. Chaudhari, "A novel digital image watermarking scheme using blind source separation," In, Proceedings, *IEEE International Conference on Image Processing (ICIP 2004)*, Singapore, pp. 2649-2652, (IEEE Cat. No. 04CH37580C), (ISBN: 0-7803-8555-1), (24-27 Oct. 2004).
 94. J. Chen, and N. S. Chaudhari, "Learning Long-Term Dependencies in Segmented Memory Recurrent Neural Networks", In, Proceedings *International Symposium on Neural Networks (ISNN 2004)*, Dalian, China, (19-21 August 2004) Also published in, *Advances in Neural Networks: Part I Lecture Notes in Computer Science*, Vol. 3173, Springer Verlag, Berlin, pp. 362-369, 2004.
 95. J. Chen, and N. S. Chaudhari, "Capturing Long-Term Dependencies for Protein Secondary Structure Prediction", In, Proceedings *International Symposium on Neural Networks (ISNN 2004)*, Dalian, China, (19-21 August 2004) Also published in, *Advances in Neural Networks: Part II Lecture Notes in Computer Science*, Vol. 3174, Springer Verlag, Berlin, pp. 494-500, 2004.
 96. J. Chen, and N. S. Chaudhari, "Improvement of Bidirectional Recurrent Neural Network for Learning Long-Term Dependencies", Proceedings of the *17th International Conference on Pattern Recognition (ICPR)*, Cambridge, U.K., vol 4, pp. 593-596, 2004. (23-26 Aug. 2004).
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 98. D. Wang, N.S. Chaudhari, J.C. Patra, "A Constructive Unsupervised Learning Algorithm for Clustering Binary Patterns," In, Proceedings, *International Joint Conference on Neural Networks, 2004 (IJCNN-04)*, Budapest, Hungary (IEEE Cat. No. 04CH37541C), (ISBN: 0-7803-8360-5), Vol. 2, pp. 1381-1386 (26-29 July 2004).
 99. J. Chen, and N. S. Chaudhari, "Protein Family Classification Using Second-Order Recurrent Neural Networks", In, Proceedings, *14th International Conference on Genome Informatics*

- (GIW 2003) organized by Japanese Society for Bioinformatics (JSBI <http://www.jsbi.org/>) Tokyo, Japan (Dec 13-15, 2003); Also in *Genome Informatics* Vol. 14, pp. 520-521. (13-15 Dec, 2003).
100. J. Chen, and N. S. Chaudhari, "Improvement of the inside-outside algorithm using prediction and application to RNA modeling", In, Proceedings, *The Second International Conference on Machine Learning and Cybernetics (IC-MLC 2003)* IEEE, Xi-an, China, (*IEEE Cat. No.03EX693*), Vol.4 p 2255-60 (Nov. 02-05, 2003).
 101. X. Wang, N.S. Chaudhari, "Constructing Minimal Cover Automata From Strings" In, Proceedings, *Second International Conference on Computational Intelligence, Robotics, and Autonomous Systems (CIRAS)*, Singapore, (Editor, Prahlad Vadakkepat, Tan Woei Wan, Tan Kay Chen and Loh Ai Poh), (Dec 15-18, 2003).
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