

# Research Publications by Faculty Members in 2007

## Journals

1. Biswaranjan Behera. Wavelet packets associated with non-uniform multi-resolution analyses. *J. Math. Anal. Appl.*, 328(2):1237-1246, 2007.
2. Biswaranjan Behera. Wavelets with Fourier transform discontinuous at the origin. *Int. J. Wavelets Multiresolut. Inf. Process.*, 5(4):679-683 2007.
3. B. Chandra and Pallath Paul V. Prediction of forest cover using decision trees. *J. Indian Soc. Agricultural Statist.*, 61(2):192-198, vi, 2007.
4. K. V. Krishna and N. Chatterjee. Holonomy Decomposition of Seminearrings. *Southeast Asian Bulletin of Mathematics*, Vol 31, pp 1113 ♦ 1122, 2007.
5. K. V. Krishna and N. Chatterjee: Representation of Near Semi-Rings and Approximation of their Categories. *Southeast Asian Bulletin of Mathematics*, Vol 31, pp 903 ♦ 914, 2007.
6. R. Jayaparvathy, S. Anand, S. Dharmaraja and S. Srikanth: Performance Analysis of IEEE 802.11 DCF with Stochastic Reward Nets, *International Journal of Communication Systems*, 20 (2007) pp. 273 - 296.
7. B. R. Handa and N. S. Kambo. Explicit estimators of the location and scale parameters of a symmetric hyperbolic distribution. *Tamsui Oxf. J. Math. Sci.*, 23(4):461♦472, 2007.
8. Jain, Tanvi; Kundu, S. Atsuji completions: equivalent characterisations. *Topology Appl.* 154 (2007), no. 1, 28--38.
9. Jain, Tanvi; Kundu, S. Boundedly UC spaces: characterisations and preservation. *Quaest. Math.*30 (2007), no. 2, 247--262.
11. McCoy, R. A.; Jain, Tanvi; Kundu, S. Factorization and extension of isomorphisms on  $C(X)$  to homeomorphisms on hyperspaces. *Topology Appl.* 154 (2007), no. 14, 2678--2696.
11. Kundu, S.; Garg, Pratibha Countability properties of the pseudocompact-open topology on  $C(X)$ : a comparative study. *Rend. Istit. Mat. Univ. Trieste* 39 (2007), 421--444.
12. Suresh Chandra, C. R. Bector and Aparna Mehra, Acceptable optimality in linear fractional programming with fuzzy coefficients, *Fuzzy Optimization and Decision Making*, Vol. 6, pp. 5-16, 2007.
13. Anulekha Dhara and Aparna Mehra, Invex Inequality system with applications to fractional minimax optimization, *Journal of Nonlinear and Convex Analysis*, Vol.8 (1), pp. 1-14, 2007.
14. Anjana Gupta, Davinder Bhatia and Aparna Mehra, Higher order efficiency, saddle point optimality and duality for vector optimization, *Journal of Numerical*

Functional Analysis and Optimization, Vol. 28 (3,4), pp. 339-352, 2007.

15. Anulekha Dhara and Aparna Mehra, Conjugate duality for nonlinear optimization problems, Journal of Industrial Management, Vol. 3 (3), pp. 415-427, 2007.

16. Vidyottama Vijay, Suresh Chandra, C. R. Bector and Aparna Mehra, Fuzzy Matrix Games via a Fuzzy Relation Approach, Fuzzy Optimization and Decision Making, Vol. 6, pp. . 299-314, 2007.

17. Gupta, Gautam; Joshi, Puneet; Tripathi, Amitabha Graphic sequences of trees and a problem of Frobenius. Czechoslovak Math. J. 57(132) (2007), no. 1, 49--52.

18. Panda, B. S.; Das, Anita On tree 3-spanners in directed path graphs. Networks 50 (2007), no. 3, 203--210.

19. Rao, S. Chandra Sekhara; Kumar, Mukesh Optimal B-spline collocation method for self-adjoint singularly perturbed boundary value problems. Appl. Math. Comput. 188 (2007), no. 1, 749--761.

20. Rao, S. C. S.; Kumar, M. B-spline collocation method for nonlinear singularly-perturbed two-point boundary-value problems. J. Optim. Theory Appl. 134 (2007), no. 1, 91--105.

21. Sharma, R. K.; Srivastava, J. B.; Khan, Manju The unit group of  $FS_3$ . Acta Math. Acad. Paedagog. Nyházi. (N.S.) 23 (2007), no. 2, 129--142.

22. Joshi, Kanchan; Sharma, R. K.; Srivastava, J. B.  $\ast$ -prime group algebras. Comm. Algebra 35 (2007), no. 11, 3673--3682.

23. Sharma, R. K.; Srivastava, J. B.; Khan, Manju The unit group of  $FA_4$ . Publ. Math. Debrecen 71 (2007), no. 1-2, 21--26.

24. Dhara, Basudeb; Sharma, R. K. Derivations with annihilator conditions in prime rings. Publ. Math. Debrecen 71 (2007), no. 1-2, 11--20.

25. Samanta, S. K.; Gupta, U. C.; Sharma, R. K. Analyzing discrete-time  $D$ - $BMAP/G/1/N$  queue with single and multiple vacations. European J. Oper. Res. 182 (2007), no. 1, 321--339.

26. J. Giacmoni and K. Sreenadh, Attractivity properties of nonnegative solutions for a degenerate parabolic equation in whole space, Nonlinear Analysis TMA, Vol.66, no.9, (2007), 1911-1928.

27. S. Prashanth and K. Sreenadh, Multiple positive solutions for a superlinear elliptic equation in  $\mathbb{R}^2$  with sublinear boundary condition, Nonlinear Analysis TMA, Vol.67, no.4, (2007), 1246-1254.

28. J. Giacmoni, S. Prashanth and K.Sreenadh, A global multiplicity result for N-Laplacian with critical nonlinearity of concave-convex type, Journal of differential equations, Vol.232, no.2,(2007) 544-572.

29. Alahmadi, Adel N.; Jain, S. K.; Srivastava, J. B. Semiprime  $CS$  group algebra of polycyclic-by-finite group without domains as summands is hereditary. J. Algebra 307 (2007), no. 2, 541--546.

30. Jain, S. K.; Kanwar, Pramod; Srivastava, J. B. When is a semilocal group algebra continuous ? J. Algebra 312 (2007), no. 1, 152--157.
31. Singh, Mohit; Tripathi, Amitabha On an extremal problem related to a theorem of Whitney. Discrete Appl. Math. 155 (2007), no. 4, 579--583.
32. Tripathi, Amitabha; Vijay, Sujith A short proof of a theorem on degree sets of graphs. Discrete Appl. Math. 155 (2007), no. 5, 670--671.

## Conference Proceedings

1. B. Chandra, P. Paul, Ashok Wardhan: Mining Data for Profitable Trading, DMIN 2007 22-30, 2007.
2. B. Chandra, Manish Gupta, M. P. Gupta: Adaptive Query Interface for Mining Crime Data. Lecture Notes in Computer Science, LNCS 4777 Springer 285-296,2007.
3. B. Chandra, P. Paul, P. K. Saxena, Shri Kant: Neural Networks for Identification of patterns . IICAI 2007: 402-411,2007.
4. B. Chandra, P. Paul: On Improving the Efficiency of SLIQ Decision Tree Algorithm. IJCNN 2007: 66-71,2007.
5. B. Chandra, Manish Gupta, M. P. Gupta: Robust Approach for Estimating Probabilities in Naive-Bayes Classifier. Lecture Notes in Computer Science, LNCS 4815 (Springer Berlin/Heidelberg) 11-16, 2007.
6. Niladri Chatterjee and Shiwali Mohan. Extraction-Based single Document Summarization using Random Indexing. Proc. 19th IEEE ICTAI-2007, Patras, Greece, IEEE Computer Society, 2007, pp 448 ♦ 455.
7. Niladri Chatterjee, Anish Johnson and Madhav Krishna. Some Improvements over the BLEU Metric for Measuring Translation Quality for Hindi. Proc. ICCTA, IEEE Computer Society, 2007, pp. 485 ♦ 490.
8. Niladri Chatterjee and Shailly Goyal. An Example Based Approach for Parsing Natural language Sentences. Proc. ICCTA, IEEE Computer Society, 2007, pp. 451 ♦ 456
9. Niladri Chatterjee and Madhav Krishna. Semantic Integration of heterogeneous databases on the Web. Proc. ICCTA, IEEE Computer Society, 2007, pp. 325 ♦ 329.
10. Hongxia Sun, S. Dharmaraja, Carey Williamson and Vaneeta Jindal: An analytical model for wireless networks with stochastic capacity , Proceedings of SPECTS 2007, San Diego, USA, July 16 - 18, 2007, pp. 205 - 214.