Dr. Hari Darshan Arora
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Area of Interest

Information Theory and its Applications, Fuzzy Optimization and Software Reliability Modeling

List of Publications

INTERNATIONAL

1. **Hari Arora** and Dr. Priti Gupta (Dec. 2005): Fano's inequality for probability based on Renyi's information, **"DIAS Technology Review, An International Journal of Business and I.T"**, Vol. 1, 45-52.
2. **Hari Arora** and Dr. Priti Gupta (Dec. 2006): "Computation of Performance for β Entropy of a DMCC Under Single and Multiple Constraint", East African Journal of Physical sciences, An International Journal of Pure and Applied Science, Kenyatta University, Kenya 7(1/2): 43-50.
3. **Hari Arora** and Dr. Priti Gupta (2007): "Upper bound on probability of error using Arimoto Measure", Bulletin of Pure and applied Sciences, Vol. 26 E(No.1), pp. 121-127.
4. **Hari Arora** and Dr. Priti Gupta (2007): "Arimoto Measure and Probability of Error, "Antarctica Journal of Mathematics, Vol 4(1): 1-7.
5. **Hari Arora,** Dr. Priti Gupta & Niranjan (July – Dec. Issue 2010) "One-One coding and Generalized Quantitative-Qualitative measure of Inaccuracy"**,** International Journal of Applied Mathematics and Applications, Vol. 5 No. 2, pp. 197-204.
6. **Hari Arora** (August Issue 2011) "Computation of Weighted Error Bounds of order α with Preferences", International Journal of Applied Systemic Studies, Volume 4, Number 1-2, pp. 121-125.
7. **Hari Arora** (March Issue 2012) "Generalized Noiseless Coding Theorem and Block Coding", International Journal of Applied Mathematics, Volume 2, Number 2, pp. 372-376
8. **Hari Arora,** Vijay Kumar & Anjali Dhiman (January 2013) "On some new Divergence measure between fuzzy sets", Proceedings of International Con. On Reliability, Infocom Technology and Optimization, pp. 178-184.
9. **Hari Arora,** Vijay Kumar & Anjali Dhiman (January 2013) "Weighted Performance function for (r,s) entropy of Discrete Memoryless Communication Channel under Single Constraint", Proceedings of International Con. On Reliability, Infocom Technology and Optimization, pp. 337-340.
10. **Hari Arora** & Anjali Dhiman (April 2013) "Monotonic Behaviour of Some New Generalized Fuzzy Information Measures & Its Essential Properties", International Journal of Mathematical Archive, Vol. 4(4), pp. 145-155.

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11. **Hari Arora** and Dr. Priti Gupta (Jul-Dec.2006): An Algorithm to find performance function for β Entropy of discrete Memoryless Communication Channels under multiple constraints, Lucknow Journal of Sciences, Vol. 3, No. 2, pp. 27-32.

12. **Hari Arora** and Dr. Priti Gupta (Dec.2006): Error Bound and Useful Entropy of Order α and Degree β, Journal of Indian Society of Statistics and Operations Research, Vol. 27, No. 1-4, pp. 17-23.

13. **Hari Arora** and Dr. Priti Gupta (August 2006): "Computation of performance function for (r,s) entropy of a DMCC under single and multiple Constraints" Indian Journal of Mathematics, Allahabad, Vol. 48, N0. 2, pp. 153-164.

14. **Hari Arora** and Dr. Priti Gupta (Dec. 2006): "An Algorithm to find Channel Capacity for (r,s) Entropy", Journal of Indian Society of Statistics and Operations Research, Vol. 27, No. 1-4, pp. 35-41.

15. **Hari Arora** and Dr. Priti Gupta (March 2005) "Generalized (r,s) Entropy and Probability of Error", Proceeding of National Conference on Application of Mathematics in Engg. And Tech. & 7th Annual Conference of ISITA, pp. 75-78.

16. **Hari Arora** and Dr. Priti Gupta (June 2008) "Generalized Performance Function for weighted β Entropy of a DMCC under Single and Multiple Constraint", Journal of Mathematics and System Sciences, India, vol. 4, no.1 pp 1-10.

17. **Hari Arora**, Niranjan and Dr. Priti Gupta (Sep. 2009) "Generalized Exponentiated Mean Code Word Length for 1:1 Codes and Generalized Quantitative-Qualitative measure of Inaccuracy", Pure and Applied Mathematika Sciences, Vol. LXX, No. 1-2, pp. 1-7.

List of Conferences Attended/Presented papers

INTERNATIONAL

1. **Hari Arora** and Dr. Priti Gupta (Dec.2006): "Computation of Performance for β Entropy of a DMCC Under Single and Multiple Constraint", Presented in 3rd International Conference on Quality, Reliability and Infocom Technology (Trends and Future Directions), INSA, New Delhi, INDIA.

2. **Hari Arora** and Dr. Priti Gupta (Dec.2009): "GENERALIZED RENYI'S ENTROPY & PROBABILTY OF ERROR WITH PREFERENCES", Presented in 4th International Conference on Quality Reliability and Infocom Technology (Trends and Future Directions), University of Delhi, Delhi, INDIA.

3. **Hari Arora** and Anjali Dhiman (Nov. 21-24, 2012): "Generalized Intuitionistic Fuzzy Information Measure – A theoretic Approach", Presented in International Conf. on History & development of Mathematical Sciences & Symposium on Non-Linear Analysis, M.D. University, Rohtak, Haryana, INDIA.

4. **Hari Arora** and Anjali Dhiman (Nov.2012): "On some new Generalized Measures of Fuzzy Directed Divergence", Presented in 6th International Conference on Quality, Reliability and Infocom Technology & Industrial Technology Management (Trends and Future Directions), University of Delhi, Delhi, INDIA.

5. **Hari Arora,** Vijay Kumar & Anjali Dhiman (January 2013) "On some new Divergence measure between fuzzy sets", Presented in International Con. On Reliability, Infocom Technology and Optimization, Amity University, Noida.

6. **Hari Arora,** Vijay Kumar & Anjali Dhiman (January 2013) "Weighted Performance function for (r,s) entropy of Discrete Memoryless Communication Channel under Single Constraint", Presented in International Con. On Reliability, Infocom Technology and Optimization, Amity University, Noida.

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7. **Hari Arora** and Dr. Priti Gupta (Dec.2006): "Recent Advancement in Performance Function and Probability of Error for various entropies", presented in National Conference on History of Mathematics and Recent Developments at Department of Mathematics, M.D.University, Rohtak (Haryana).
8. **Hari Arora** and Dr. Priti Gupta (March 2005) "Generalized (r,s) Entropy and Probability of Error", presented in 7th Annual Conference of Indian Society of Information Theory and applications, Malout, Punjab, India
9. **Hari Arora** and Dr. Priti Gupta (Nov.2006): "Computation of Useful Error Bounds of Order γ", National Conference on Computer Application and Information Technology at Krishna Institute of Engineering and Technology, Ghaziabad (U.P.), INDIA.
10. **Hari Arora** and Dr. Priti Gupta (March 2006): "Probability of Error with Preferences", presented in 8th Annual Conference of ISITA, Panipat, India
11. **Hari Arora** (August, 2010): Attended National Workshop on Modeling, Optimization and Their Applications scheduled on 17-21 August, 2010 in the Department of Statistics, M.D. University, Rohtak, India.
12. **Hari Arora** (October, 2012): Attended National Workshop on Mathematics and Its Applications funded by UGC and Organized by Department of Mathematics, Deenbandhu Chhotu Ram University of Science & Technology, Murthal, Sonipat, Haryana, India.
13. **Hari Arora** (April, 2013): Attended and Presented a research paper entitled " On Generalized Intutionistic Fuzzy Information Measure-Applications to decision making" in National Conference on Recent Trends in Operations Research funded by DST and CSIR Organized by Department of Applied Sciences, ASET, Bijwasan, New, Delhi, India.

Book Published

- Engineering Mathematics Vol. I, 2007 (Amity University): Published by S. K. Kataria & Sons, India.
- Engineering Mathematics Vol. II, 2008 (Amity University): Published by S. K. Kataria & Sons, India
- Engineering Mathematics Vol. III, 2008 (Amity University): Published by S. K. Kataria & Sons, India
- Engineering Mathematics Vol. I, 2008 (U.P.T.U, Lucknow): Published by S. K. Kataria & Sons, India
- Engineering Mathematics Vol. II, 2009 (G.G.S.I.P.U, Delhi): Published by S. K. Kataria & Sons, India