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SOME BOUNDS OF CSISZAR'S F-DIVERGENCE MEASURE IN TERMS OF THE WELL KNOWN DIVERGENCE MEASURES OF INFORMATION THEORY

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Abstract

Divergence measures and information inequality and their bounds are well known in the literature of Information Theory. In this paper we establish an upper and a lower bound of a Triangular Arithmetic and Geometric divergence measure in the class of Csiszar's f-divergence measure in terms of the Kullback-Leibler, Hellinger, and Chi-square divergence measure.

Key Words: f-divergence measure, chi-square divergence, Kullback-Leibler distance, Hellinger discrimination, Triangular discrimination, Arithematic, Geometric, Harmonic mean divergence measure, Bhattacharya divergence measure etc.

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