

# **PROBABILITY DISTRIBUTION AND MAXIMUM ENTROPY PRINCIPLE**

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## **ABSTRACT**

In the literature of information theory, different researchers have provided various applications of simple and weighted measures of information to different disciplines of Engineering Sciences. One such discipline is Statistics where maximum entropy principle finds its applications. In the present communication, we have used this principle for approximating a given probability distribution. The technique has also been illustrated with the help of numerical examples.

**KEYWORDS:** Entropy, Maximum entropy principle, Weighted Entropy, Directed divergence, Moments