

ON THE JOINT DISTRIBUTION OF TWO DISCRETE RANDOM VARIABLES

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Summary

Let X, Y be two discrete random variables with finite support and $X \geq Y$. Suppose that the conditional distribution of Y given X can be factorized in a certain way. This paper provides a method of deriving the unique form of the marginal distribution of X (and hence the joint distribution of (X, Y)) when partial independence only is assumed for Y and $X - Y$.