Simulation of some Multivariate Distributions

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Abstract

I this paper some classes of multivariate distributions are considered, defined by using the concept of *copula.* Then, some general simulation procedures of these distributions are introduced. Particularly the *Archimedean copula* is considered and simulation procedures for multivariate distributions derived from these copulas are presented. Particular types of distributions are considered and computer algorithms for their simulation are described. Finally, simulation of some multivariate distributions, based on Kintchine's unimodality theorem is discussed.

Keywords: multivariate distributions, random variate generation, copulas.

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