Modeling dependence between random variables using copulas

Michal Dibala
Department of Mathematics,
Faculty of Civil Engineering,
Slovak University of Technology,
Radlinského 11,
813 68 Bratislava, Slovakia
dibala@math.sk

Abstract

The concept of copulas is normaly used to model the dependence structure between two or more random variables. Random variables are transformed to the unit interval $I = [0, 1]$ by using quasi-inverse transformation. As a result we get a normalised multivariate distribution function called the copula. Copulas uniquely determine the dependence structure of multiple random variables. The aim of the presentation is to introduce the concept and its applications.

Keywords: Distribution function, Dependence structure, Correlation.

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