A method for approximately sampling high-dimensional count variables with prespecified Pearson correlation.

Abstract:
In insurance applications yearly claim totals of different coverage fields are often dependent. In many cases there are numerous claim totals which are zero. A marginal claim distribution will have an additional point mass at zero, hence this probability function will not be continuous at zero and the cumulative distribution functions will not be uniform. Therefore using a copula approach to model dependency is not straightforward. We will illustrate how to express the joint probability function by copulas with discrete and continuous margins. A pair copula construction will be used for the fit of the continuous copula allowing to choose appropriate copulas for each pair of margins.

Stichworte:
dependence modeling, health insurance, pair-copula-constructions, zero-claim.
Hinweise: in Revision

Semester (für SAP-Datenerfassung):
SS 10

Format:
Text

Occurences:
- Einrichtungen > Fakultäten > Fakultät für Mathematik > Zentrum Mathematik > M4 Mathematische Statistik (Prof. Klüppelberg) > Preprints / Veröffentlichung > Claudia Czado
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