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MULTIVARIATE LIFETIME DISTRIBUTIONS

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ABSTRACT

The aim of this paper is to introduce and investigate a novel method for constructing multivariate lifetime distributions. The idea is based on the combined use of copula and mixtures. Both have been used on their own for constructing multivariate lifetime distributions, but with only moderate success. Our aim is to show that their joint use possesses some distinct advantages.

KEYWORDS: Bayesian Inference, Dependence, Frank's Copula, Gaussian copula, Gompertz Distribution, Mixture