A novel modelling approach to increase the explained risk in the proportional hazards regression

Deniz İnan[1], Öyküm Esra Aşkın[2] and Busenur Sarıca[1]

[1]*Marmara University, İstanbul, Turkey, denizlukuslu@marmara.edu.tr, busenur.sarica@marmara.edu.tr*

[2]*Yıldız Technical University, İstanbul, Turkey, oykumesra@gmail.com*

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In this study, a modelling strategy to increase the information obtained from censored observations is proposed. For this purpose uncensored observations are clustered using fuzzy c-means algorithm and multivariate gaussian membership functions are determined on each cluster. Censored observations are weighted considering membership values and the distances between censoring time and the time component of centers. Simulation studies are performed to investigate the performance of proposed approach according to measure of explained risk.

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