

Sinh-skew-normal/Independent Regression Models

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Abstract: *Skew-normal/independent (SNI) distributions form an attractive class of asymmetric heavy-tailed distributions that also accommodate skewness. Based on this distribution, we then propose a general class of nonlinear regression models, generalizing the regression models of Rieck and Nedelman (1991) that have been used extensively in Birnbaum-Saunders regression models. .*

Keywords: Nonlinear regression; Birnbaum-Saunders distribution; EM-algorithm; Robust estimation; Skew-normal/Independent distribution; Sinh-normal distribution.

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