## عنوان مقاله:

Parameter estimation in fuzzy partial univariate linear regression model with non-fuzzy inputs and triangular fuzzy outputs

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## خلاصه مقاله:

This paper proposed an extension for the classical partial univariate regression model with non-fuzzy inputs and triangular fuzzy output. For this purpose, the popular non-parametric estimator and the conventional arithmetic operations of triangular fuzzy numbers were combined to construct a fuzzy univariate regression model. Then, a hybrid algorithm was developed to estimate the bandwidth and fuzzy regression coefficient. Some common goodness-of-fit criteria were also used to examine the performance of the proposed method. The effectiveness of the proposed method was then illustrated through two numerical examples including a simulation study. The proposed method was also compared with several common fuzzy linear regression models with exact inputs and fuzzy outputs. Compared to the available fuzzy linear regressions models, the numerical results clearly indicated that the proposed fuzzy regression model is capable of exhibiting more accurate performances.

## کلمات کلیدی:

Fuzzy partial linear model, kernel method, least absolute deviation, optimal bandwidth, goodness-of-fit measure

## لینک ثابت مقاله در پایگاه سیویلیکا:

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