عنوان مقاله:

A Robust Approach to Estimate the Uniaxial Compressive Strength of Intact Rocks

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خلاصه مقاله:

The uniaxial compressive strength of intact rocks is extensively used in many rock engineering projects.High-quality core samples are required for the uniaxial compressive strength determinations. However, such core samples cannot always be obtained from weak rocks. For this reason, the predictive models are often employed to estimate indirectly. In present study, various models have been developed in order to predict uniaxial compressive strength. For this purpose different tests were accomplished. The root mean square error index was calculated as 6.1 from the neuro-fuzzy model and 13.63 from the multiple regression model. As a result, performance index reveled that the neuro-fuzzy exhibited a very high prediction capacity

کلمات کلیدی:

UCS, ANFIS, multiple regression, Exploratory Data Analysis, cluster analysis

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