

## عنوان مقاله:

M5 model approach for prediction of liquefaction potential and lateral spreading

## محل انتشار:

چهارمین کنگره بین المللی عمران ، معماری و توسعه شهری (سال: 1395)

تعداد صفحات اصل مقاله: 11

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## خلاصه مقاله:

Liquefaction and consequent lateral spreading are the phenomena that can be disastrous during earthquakes. Predicting the liquefaction potential and the displacement caused by lateral spreading is helpful in decreasing possible damage. Various methods are used to present models to predict the liquefaction potential and lateral spreading displacement. In this study, the predicting models are derived by M5' algorithm which constructs decision trees with multivariate linear models. Some experimental datasets were used for training and testing data. The presented models, are simpler than previous models, in a way that physical behavior of every parameter are understandable from the structure of the formula. Also the accuracy of the presented models is acceptable in comparison with other formulas. M5' algorithm is a suitable tool to derive prediction models.

## کلمات کلیدی:

Liquefaction potential, Strain energy, Lateral spreading, Model tree, M5' algorithm

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/617881>

