

## عنوان مقاله:

Rock Slope Stability Analysis; an Evolutionary Approach

## محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

A new approach is presented based on evolutionary polynomial regression (EPR) for modelling of stability of rock slopes. EPR is an evolutionary data mining technique that generates a transparent and structured representation of the behaviour of a system directly from data. This method can operate on large quantities of data in order to capture nonlinear and complex interactions between variables of the system. It also allows the user to gain insight into the behaviour of the system. EPR model is developed and validated using results from sets of data from literature. The developed model is used to predict the factor of safety of slopes against failure for conditions not used in the model building process. The results show that the proposed approach is effective and robust in modelling the behaviour of slopes and provides a unified approach to slope stability analysis. Merits and advantages of the proposed approach are also highlighted.

## کلمات کلیدی:

rock slopes, stability analysis, evolutionary data mining

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/165953>

