

عنوان مقاله:

Soil Classification Using a Combined Algorithm of Simulated Annealing and Genetic Programming

محل انتشار:

هشتمین کنگره بین المللی مهندسی عمران (سال: 1388)

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خلاصه مقاله:

This paper presents a novel approach for the determination of soil classification using a hybrid search algorithm that couples genetic programming (GP) and simulated annealing (SA), as a combined algorithm, called GP/SA. Properties of soil namely, plastic limit, liquid limit, color of soil, percentage of gravel, sand, and fine grained particles were used as input variables to the models to determine the classification of soils. The models were developed using a reliable database obtained from the previously published literature. The results of GP/SA based formulations were found to be more accurate as compared to the experimental, numerical and analytical results obtained by other researchers.

کلمات کلیدی:

.Soil classification, Combined genetic programming and simulated annealing, Neural network, IS classification system

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