

## عنوان مقاله:

Comparative Analysis of Machine Learning Algorithms with Optimization Purposes

## محل انتشار:

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## خلاصه مقاله:

The field of optimization and machine learning are increasingly interplayed and optimization in different problems leads to the use of machine learning approaches. Machine learning algorithms work in reasonable computational time for specific classes of problems and have important role in extracting knowledge from large amount of data. In this paper, a methodology has been employed to optimize the precision of defect detection of concrete slabs depending on their qualitative evaluation. Based on this idea, some machine learning algorithms such as C<sub>4.5</sub> decision tree, RIPPER rule learning method and Bayesian network have been studied to explore the defect of concrete and to supply a decision system to speed up the defect detection process. The results from the examinations show that the proposed RIPPER rule learning algorithm in combination with Fourier Transform feature extraction method could get a defect detection .rate of 93% as compared to other machine learning algorithms

## کلمات کلیدی:

decision tree, Bayesian network, rule learning algorithm, Optimization, Soft Computing

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1605944>

