

عنوان مقاله:

Forecasting Railway Track Geometry Condition Using Neural Network Approach

محل انتشار:

پنجمین کنفرانس بین المللی پیشرفت های اخیر در مهندسی راه آهن (سال: 1396)

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خلاصه مقاله:

Accurate prediction of the track geometry degradation is a key factor for planning and scheduling of maintenance activities to keep the safety and availability of railway in an acceptable level. The aim of the present paper is to predict track geometry condition using the application of Neural Network. For this purpose, a case study has been done on a specific track line, in which longitudinal level is considered as quality indicator of railway track geometry quality. Several neural network models are developed with different number of neurons to find a model with the best performance. The developed model was verified by comparing to inspection geometry data and the results indicate that the developed model using Neural Network is able to properly predict track geometry condition.

کلمات کلیدی:

railway track geometry, degradation, prediction, Neural Network, maintenance

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