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Neural Network Modelling for Turkey Railway Load Carrying Demand

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Abstract : The transport sector has an undisputed place in human life. People need transport access to continuous increase day by day with growing population. The number of rail network, urban transport planning, infrastructure improvements, transportation management and other related areas is a key factor affecting our country made it quite necessary to improve the work of transportation. In this context, it plays an important role in domestic rail freight demand planning. Alternatives that the increase in the transportation field and has made it mandatory requirements such as the demand for improving transport quality. In this study generally is known and used in studies by the definition, rail freight transport, railway line length, population, energy consumption. In this study, Iron Road Load Net Demand was modeled by multiple regression and ANN methods. In this study, model dependent variable (Output) is Iron Road Load Net demand and 6 entries variable was determined. These outcome values extracted from the model using ANN and regression model results. In the regression model, some parameters are considered as determinative parameters, and the coefficients of the determinants give meaningful results. As a result, ANN model has been shown to be more successful than traditional regression model.

Keywords : railway load carrying, neural network, modelling transport, transportation
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