

Presenting a Model Based on Artificial Neural Networks to Predict the Execution Time of Design Projects

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Abstract : After feasibility study the design phase is started and the rest of other phases are highly dependent on this phase. forecasting the duration of design phase could do a miracle and would save a lot of time. This study provides a fast and accurate Machine learning (ML) and optimization framework, which allows a quick duration estimation of project design phase, hence improving operational efficiency and competitiveness of a design construction company. 3 data sets of three years composed of daily time spent for different design projects are used to train and validate the ML models to perform multiple projects. Our study concluded that Artificial Neural Network (ANN) performed an accuracy of 0.94.

Keywords : time estimation, machine learning, Artificial neural network, project design phase

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