

## Best Resource Recommendation for a Stochastic Process

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**Abstract :** The aim of this study was to develop an Artificial Neural Network's recommendation model for an online process using the complexity of load, performance, and average servicing time of the resources. Here, the proposed model investigates the resource performance using stochastic gradient decent method for learning ranking function. A probabilistic cost function is implemented to identify the optimal  $\theta$  values (load) on each resource. Based on this result the recommendation of resource suitable for performing the currently executing task is made. The test result of CoSeLoG project is presented with an accuracy of 72.856%.

**Keywords :** ADALINE, neural network, gradient decent, process mining, resource behaviour, polynomial regression model

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