Topic Selection Service

Message from the Topic Selection Expert

Thank you for choosing Phdassistance Research Lab to assist you in selecting the suitable topic for your PhD. We have carefully reviewed various recent topics according to your area of interest and have shortlisted the topic that best suited to you. The selection and order of recommendation are based on a subjective opinion that takes into account the specifics of your requirement. Next page onward, we have provided topic selection summary followed by background of the selected topic along with references. Please check all the details presented in the summary.

Once you select the topic, you may also request our recommended services to proceed further. Thank you again for choosing Phdassistance Research Lab to help you!

Order Information

Order code: HTS-SAM-002-2020

Topic Selection Summary

Title	Pre- PhD Dissertation Topic Selection
Service Type	Topic Selection Service, Elite.

Problem Statement

Previous studies had used various data mining techniques such as clustering, association analysis, correlation analysis (*Weeramanthrie et al., 2018 Chertchom, 2018 Hernández-Chacín, 2018 Ramdhani et al., 2017 Zhang, 2017 Papoutsoglou et al. 2017; Qu 2015*), but still, time series, outliner analyses *(Bharara et al., 2017)* and neural network have yet to be implemented in many of these studies especially to solve the problem related to recruiting, performance, salary and training of HR.

Proposed Topic

Topic 1: *Prediction of Employee Turnover using Data Mining Classification and Fuzzy decision Tree (FDT)*

The proposed study will attempt to address employee turnover. The study will use Fuzzy decision tree algorithm to identify the factors that influence employee turnover.

Topic 2: *Employee Performance Evaluation and Training using Artificial Neural Network (ANN)*

The proposed study will attempt to address employee performance evaluation and training. The study will use C4.5 decision tree algorithm that utilises a neural network ensemble to pre-process the training data for decision tree construction.

For both the topics, factors are selected based on genetic algorithm with filter, while outlier with distance-based outliers, missing data attribute values detected with a self-organising map, regularised expectation maximation algorithm. In both the topics, the proposed model will be evaluated using confusion matrices, such as ROC, AUC graphs, MAE, MSE and NMSE. The proposed algorithms will be compared with traditional ones such as Naïve Bayes, Decision tree, SVM, and Rule-based classifier. These metrics will provide with the basic understanding of the validity of the proposed model. Further, the study will adopt R Package, if not R studio to write algorithm. The proposed framework will help the organisation to identify the relevant skills and competencies based on the job advertisements and job profile matching with existing needs of the firm. The study will use a real data set and compare the differences of the algorithms and chose the best that suits the real-world data set to build a model.