ABSTRACT

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Comparative Analysis of Methods K-Nearest Neighbor, Support Vector Machine and Decision Tree on Prediction Model of Turnover Intention

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Keywords: Prediction Model, Turnover Intention, K-Nearest Neighbor, Support Vector Machine, Decision Tree.

(xii + 33 + Appendix)

This study analyzed the comparison of methods on machine learning technique to predict turnover intention, turnover intention refers to intention or possibility of an employee to leave a company or the job that he is currently working on. The analysis with comparing the K-Nearest Neighbor, Support Vector Machine and Decision Tree methods, in an effort to predict turnover intention and reduce the risks of turnover intention in employee. The dataset used is taken from the Kaggle dataset, the dataset file is in the form of human resource (HR) data records with 311 data records with 24 features used out of 36 features. The dataset is obtained by using the K-Nearest Neighbor, Support Vector Machine and Decision Tree methods to calculate the accuracy, precision and sensitivity with a confusion matrix, the results of accuracy, precision and sensitivity from those three methods are compared and the method with the highest average percentage of accuracy, precision and sensitivity will be used as a prediction model.

Bibliography (2008-2021)