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Survey of Loan Prediction System Using Machine Learning Techniques

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Abstract: *In today's world, due to advancement in technologies day by day the quality of life and ease of doing things improved. Using different technologies, banking sector is also improving rapidly. By use of latest tools, organizations can reduce their repitative task. Banking sector always requires accurate tasks. Banks has different sources of incomes but major source of banks income is loan given to customers and other small and large businesses. So it is very important for any bank or financial organization to choose good applications among several applications for loan approval. For approving loan of the particular customer banks need to follow different processes to ensure that customer is eligible for loan or not. Bank considers different parameters to decide their final decision about loan approval. They need to verify customer details one by one and then need to decide whether the loan should be given or not. But using these prediction system, one can check whether he/she is eligible for loan or not. Both customer and bank officials can use this to check eligibility of a particular application. In this system we are using different machine learning algorithms and techniques for predictions. In this system, our model is trained on past loan dataset and then tested on the test data to check accuracy. Using this machine learning model, it becomes easy to predict loan approval chances of a particular application. This model uses mainly two machine learning algorithms, support vector machine (SVM) and random forest (RF). Using machine learning algorithms and techniques, it performs different processes on dataset and finds final prediction. If there is huge number of customers who were unable to return loan before stipulated time then banks will undergo a huge financial crisis. So it is important for banks to find out that the particular customer is defaulter (Bad) or non defaulter (Good).*

Keywords: Machine Learning, Loan Dataset, Support Vector Machine, Random Forest, Decision Tree, Website, Automation, Prediction, train, test.

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