

Bank Loan Prediction using Machine Learning Algorithms and Web Development

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Abstract: Technology has improved human existence and quality of life. With the advancement of technology, the banking sector is also seeing many improvements. The banking industry is always in need of more accurate predictive modeling systems for many problems. A bank's primary concern is to approve or deny a loan to an applicant. The number of loan approval applications is increasing daily. There are some bank policies that should be considered when selecting a loan approval applicant. Based on several parameters, the bank has to decide the best parameters for approval. Manually screening and recommending each individual for credit approval is difficult and risky. Predicting loan defaults is a difficult task for the banking industry. Many lenders suffer large losses because they do not have accurate models to predict defaults. The main purpose of this work is to predict whether it is safe to approve a loan for a particular person. The goal of these systems is to accurately predict a borrower's ability to repay a loan on time or make a credit card payment. Researchers have taken different approaches to solving this problem, and it remains an active area of research. Data mining and machine learning are emerging tools widely used by financial institutions to predict payment defaults. These tools can effectively mine large datasets that are not possible with traditional methods. Various machine learning algorithms are available, including support vector machines (SVM), random forests (RF), and decision trees. Web development allows you to display forecasts in graphs, images, histograms, etc. on your website. Bank employees and applicants can use a simple website to check if a loan should be approved by entering the appropriate data.

Keywords: Machine Learning, Customer Dataset, Graphical Representation, SVM, Random Forest, Web Development.

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