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Credit Score Prediction using Machine Learning

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Abstract: *Credit score prediction plays a crucial role of financial risk assessment and for making informed decisions. This paper gives the effectiveness of various machine learning (ML) algorithms in predicting credit scores by using a dataset obtained from Kaggle. The dataset has financial attributes such as income, credit history, outstanding debt, credit score. This research involves data preprocessing, feature selection, model training, and evaluation of multiple ML algorithms, including logistic regression, decision trees, random forests, and neural networks. Results provides that Support Vector Machine (SVM) gives the highest accuracy of 87%. Additionally, feature importance analysis helps to identify that income is the most significant factor influencing credit scores, while loan history has the least impact. The findings contribute to the optimization of credit score prediction models for financial institutions.*

Keywords: Credit Score, Machine Learning, Algorithms, Prediction.

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