Logistic Regression Random Forest Decision Trees Accuracy = 82.12%. Adaboosting Weighted and unweighted models implemented. Anuruddha Thennakoon Chee Bhagyani Sasitha Premadasa Real-time Credit Card Fraud detection using Machine Learning Nuwan Kuruwitaarachchi Germanno Teles Joel JPC Rodrigues Ricardo AL Rabelo Sarida Neural Network and Bayesian Network models for credit risk prediction Artificial Neural Network and Bayesian Network models For credit risk prediction At fusion approach using Dempster-Shafer theory and Bayesian learning BLAST-SSAHA Hybridiziation for Credit Card Fraud Detection Markow Model Hidden Markow Model For Card Fraud Detection rate of Fuzzy Darwinian petection of Credit Card Fraud Hidden Markow Model Hidden Markow Model Hidden Markow Model Hidden Markow model accuracy is very low compared to others	Name			
International of the product of the production o		Authors	Methodology	Key Points
Security Transport of Augustions in Control Care Months Control Care Control Care Control Control Care Control Control Care Control Control Care Control			Logistic Regression	
The Control of the Co			Random Forest	Talks about FICO(Fair Isaac Corporation) model for credit scoring used in US.
The Control of the Co	The application of ML algorithms in Credit Card Default		Decision Trees	Accuracy = 82.12%.
Sensitive Child Cell Stand develop viring Machinery And Sensitive Child Stand develop		Yue Yu		
Cost Biggardin Annual Cost Cost Cost Annual Advantacionaria National Annual Cost Cost Cost Cost Cost Cost Cost Cost			0	μ
Sold Procedure in the control of process or the control of the con			Support Vector Machines	
Section Conformal disentence services (and content services) (and co				Focuses on four main fraud ocassions in real-world transactions
Manus frozentestento Anne De Chodagos Anne De	Bool time Credit Card Fraud detection using Machine			
Secretary 1925 and 19	•			
Section Transcription of Region Interval would be provided to the provided of	Learning		Logistic Regression	
Route Rout		Germanno Teles		NB accuracy = 81.32% in 175s (training time)
Service of Aship and Service o		Joel JPC Rodrigues		ANN accuracy = 81.35% in 6s (training time)
Annual scores from the property of special between the property of special between the property of special between the property of the propert	Artificial Neural Network and Bayesian Network models	Ricardo AL Rabelo	Bayesian Networks	Much lower MSE in case of ANN
A final magnitude in the company of	for credit risk prediction	Sergei A Kozlov	Artificial Neural Networks	Mean score of ANN and NB = 82%
Coeff cost fract desertion with a report former of the following of the control and found the coeff cost of the coeff coeff fract fraction for the coeff coeff fraction for the coeff coeff fraction for the coeff coeff coeff fraction for the coeff fraction for t				
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Could Could Found diseases with a sound messace in County of County County of County C		S Benson Edwin Raj	Credit Card Fraud Detection Using	Neural network shows good accuracy in fraud detection and processing speed is
Could Could Found diseases with a sound messace in County of County County of County C	Analysis on credit card fraud detection methods	A Annie Portia	Bayesian and Neural Networks	also very high
Sealer Service with a neutral relation with a neutral relation of the 200 call				Trained on a large sample of labelled credit card account transactions
Control Count Present distinction with a secural relation Present Control Pr				
Count found disention with a moral network County C		Sushmito Ghosh		
Legis Regression of 49/10/10 Legis Regression (4.99/10/10 Legis Regression (4.99/10/10) Legis Regression (Condit Cord Froud dot		Artificial Nous-I Natural	This system was installed on ibivi 5090 at Mellon Bank of NewYork
Secretary of the control of the cont	credit card Fraud detection with a neural network	Douglas L Reilly		
April				
Description				
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March Marc		Jovita Hembram	CatBoost Classifier (84.045%)	Different algorithms used like Categorical boosting
March Marc	Loan Default Forecasting using Data Mining			
And stromary of the production using decision trees and render the production of final prediction using decision trees and render the production of the prod			, , , ,	
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Anabasos (1907s) Anabas				
Source Default Prediction with Machine Learning Techniques UIL Lat Logistic Regression (99%) October Prediction Logistic Regression	forest: A comparative study	Preeti Nagrath		who defaulted on their loan
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izan braid Prediction with Machine Learning Exchanges Mail March			XGBoost (71.66%)	
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Trechologues Mail Section Mail Continues Mail Cont	Loan Default Prediction with Machine Learning			Hyper parameters used in the models described in-depth
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Bank Loan Approval Prediction Using Machine Learning Techniques Bank Loan Approval Prediction Using Machine Learning Techniques Techniqu		+	Laniatia Danasaia a (COO)	
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Substitution Subs			Random Forest(79%)	
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and machine Survesh Singh SVM(82%) Naive Bayes(76%) Naive Baye	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.8.2%) Artificial Neural Network(99.9.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(779%) Decision Tree	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Logistic Regression (Ba. 8ays) Logistic Regression (Ba. 8ays)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset	Chuntian Luo Shengija Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Logistic Regression (88.89%) SVM (73.02%) SVM	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Loan Default Risk Assessment using Shivangi Gupta XG Boost(88.85%)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Anushi Jain Random Forest (88.85%) Loan Default Risk Assessment using Shivangi Gupta X6 Boost (88.57%) Supervised Learning Annotes Stime Taken (in seconds) Model Accuracies & Time Taken (in seconds) MODELS (Balanced Classes) Before PCA After PCA Random Forest 96.62% (7.27s) 95.1871 % (18.54) Decision Tree 95.12% (6.68s) 96.2044 % (0.70) SVM 76.12% (58.20s) 62.0037 % (346.38) KNN 93.89% (0.30s) 98.99% (3.68) Gausian Naive Bayes 93.89% (0.26s) 98.0970% (2.84) ANN 15.154% (209.16s) 50.623 % (209.9) KG Boost 98.52% (4.74s) 97.7011 % (0.96) LGBM 97.30 (2.95s) 97.8068 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) Sydve Sayes(76%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Anushi Jain Random Forest (88.85%) Loan Default Risk Assessment using Shivangi Gupta X6 Boost (88.57%) Supervised Learning Annotes Stime Taken (in seconds) Model Accuracies & Time Taken (in seconds) MODELS (Balanced Classes) Before PCA After PCA Random Forest 96.62% (7.27s) 95.1871 % (18.54) Decision Tree 95.12% (6.68s) 96.2044 % (0.70) SVM 76.12% (58.20s) 62.0037 % (346.38) KNN 93.89% (0.30s) 98.99% (3.68) Gausian Naive Bayes 93.89% (0.26s) 98.0970% (2.84) ANN 15.154% (209.16s) 50.623 % (209.9) KG Boost 98.52% (4.74s) 97.7011 % (0.96) LGBM 97.30 (2.95s) 97.8068 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81.89%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Loan Default Risk Assessment using Shivangi Gupta XG Boost(88.57%) Supervised Learning Mandeep Singh Narula ANN(88.74%)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81.89%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Supervised Learning Mandeep Singh Narula ANN(88.74%) Model Accuracies & Time Taken (in seconds) MODELS (Balanced Classes) Before PCA After PCA Random Forest 96.62% (7.275) 96.1871 % (18.54) 96.1871 % (18.54) Decision Tree 95.12% (6.688) 96.2044 % (0.70) 95.12% (6.688) KNN 76.12% (58.20s) 62.6037 % (346.38) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.30s) 98.097% (3.84) 98.097% (3.84) ANN 51.54% (209.16s) 50.6233 % (209.09) 98.027% (3.46) ANN 51.54% (209.16s) 50.6233 % (209.09) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.8068 % (1.50) 97.8068 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) 97.815 % (4.94) MIP 92.43% (100.15s) 57.8150% (12.95) 97.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.89%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Model Accuracies & Time Taken (in seconds)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques	Chuntian Luo Shengija Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) Sydick Regression(81%) Sydick Regression(81%) Sydick Regression(81%) Sydick Regression(88.89%) SVM(73.02%) Random Forest(88.85%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
MODELS (Balanced Classes) Before PCA After PCA Random Forest 96.62% (7.27s) 96.1871 % (18.54) Decision Tree 95.12% (6.68s) 96.2044 % (0.70) SVM 76.12% (58.20s) 62.037 % (346.38) KNN 93.89% (0.30s) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.26s) 98.097% (2.84) ANN 51.54% (209.16s) 50.6233 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.808 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.815% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.857%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
MODELS (Balanced Classes) Before PCA After PCA Random Forest 96.62% (7.27s) 96.1871 % (18.54) Decision Tree 95.12% (6.68s) 96.2044 % (0.70) SVM 76.12% (58.20s) 62.037 % (346.38) KNN 93.89% (0.30s) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.26s) 98.097% (2.84) ANN 51.54% (209.16s) 50.6233 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.808 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.815% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.857%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
MODELS (Balanced Classes) Before PCA After PCA Random Forest 96.62% (7.27s) 96.1871 % (18.54) Decision Tree 95.12% (6.68s) 96.2044 % (0.70) SVM 76.12% (58.20s) 62.037 % (346.38) KNN 93.89% (0.30s) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.26s) 98.097% (2.84) ANN 51.54% (209.16s) 50.6233 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.808 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.815% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.857%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
MODELS (Balanced Classes) Before PCA After PCA Random Forest 96.62% (7.27s) 96.1871 % (18.54) Decision Tree 95.12% (6.68s) 95.024 % (0.70) SVM 76.12% (58.20s) 62.6037 % (346.38) KNN 93.89% (0.30s) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.26s) 98.097% (2.84) ANN 51.54% (209.16s) 50.6233 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.8068 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.857%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
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Decision Tree 95.12% (6.68s) 96.2044 % (0.70) SVM 76.12% (58.20s) 62.6037 % (346.38) KNN 93.89% (0.30s) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.26s) 98.097% (2.84) ANN 51.54% (209.16s) 50.6233 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.800 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.815% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Surshant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shiwangi Gupta Mandeep Singh Narula	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.87%) ANN(88.74%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
SVM 76.12% (58.20s) 62.6037 % (346.38) KNN 93.89% (0.30s) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.26s) 98.0970% (2.84) ANN 51.54% (209.16s) 50.623 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.806 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes)	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Surshant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta Mandeep Singh Narula	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.85%) XG Boost(88.57%) ANN(88.74%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
KNN 93.89% (0.30s) 98.097% (3.84) Gausian Naive Bayes 93.89% (0.26s) 98.097% (2.84) ANN 51.54% (209.16s) 50.6233 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.8068 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865% (4.94) MIP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Surshant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shiwangi Gupta Mandeep Singh Narula	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.87%) ANN(88.74%)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
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ANN 51.54% (209.16s) 50.6233 % (209.09) XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.808 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MLP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest Decision Tree SVM	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Surshant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta Mandeep Singh Narula ETaken (in seconds) Before PCA 96.62% (7.27s) 95.12% (6.68s) 76.12% (6.68s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (346.38)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.8008 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shiwangi Gupta Mandeep Singh Narula e Taken (in seconds) Before PCA 96.62% (7.275) 95.12% (58.805) 93.89% (0.30s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.85%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (346.38)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
XG Boost 98.52% (4.74s) 97.7011 % (0.56) LGBM 97.3% (2.95s) 97.8008 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MLP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN Gausian Naive Bayes	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta Mandeep Singh Narula e Taken (in seconds) Before PCA 96.62% (7.27s) 95.12% (6.68s) 76.12% (58.20s) 93.89% (0.30s) 93.89% (0.30s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.89%) SVM(73.02%) Random Forest(88.8.5%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (3.46.38) 98.0970% (2.84)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
LGBM 97.3% (2.95s) 97.8008 % (1.50) Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MIP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN Gausian Naive Bayes	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta Mandeep Singh Narula e Taken (in seconds) Before PCA 96.62% (7.27s) 95.12% (6.68s) 76.12% (58.20s) 93.89% (0.30s) 93.89% (0.30s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.89%) SVM(73.02%) Random Forest(88.8.5%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (3.46.38) 98.0970% (2.84)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
Logistic Regression 79.01% (33.46s) 77.3865 % (4.94) MLP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning MODELS (Balanced Classes) MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN Gausian Naive Bayes	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta Mandeep Singh Narula ETaken (in seconds) Before PCA 96.62% (7.27s) 95.12% (6.68s) 76.12% (58.20s) 93.89% (0.30s) 93.89% (0.26s) 51.54% (209.16s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.85%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (346.38) 98.0979% (3.84) 98.0979% (3.84) 98.0979% (2.84) 50.6233 % (209.09)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
MLP 92.43% (100.15s) 57.8150% (12.95)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN Gausian Naive Bayes ANN XG Boost	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shiwangi Gupta Mandeep Singh Narula e Taken (in seconds) Before PCA 96.62% (7.275) 95.12% (6.68s) 76.12% (58.20s) 93.89% (0.26s) 51.54% (209.16s) 99.852% (4.74s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Naive Bayes(76%) Logistic Regression(88.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (346.38) 98.0979% (2.84) 98.0979% (2.84) 98.0979% (2.84) 99.09790 (2.84) 90.6233 % (209.09) 97.7011 % (0.56)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN Gausian Naive Bayes ANN KG Boost LGBM	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta Mandeep Singh Narula e Taken (in seconds) Before PCA 96.62% (7.27s) 95.12% (6.68s) 76.12% (58.20s) 93.89% (0.30s) 93.89% (0.30s) 93.89% (0.26s) 51.54% (209.16s) 98.52% (4.74s) 97.3% (2.95s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (3.46.38) 98.0970% (2.84) 98.0970% (2.84) 98.0970% (2.84) 99.8097% (2.84) 99.8097% (2.84)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
197 99% (36 75s) 198 1077% (A 56)	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning MODELS (Balanced Classes) MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN Gausian Naive Bayes ANN XG Boost LGBM Logistic Regression	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh Kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Survesh Singh Vinay Kumar Nassa Anushi Jain Shivangi Gupta Mandeep Singh Narula ETAKEN (In seconds) Before PCA Before PCA Before PCA 96.62% (7.27s) 95.12% (6.68s) 76.12% (58.20s) 93.89% (0.30s) 93.89% (0.26s) 51.54% (209.16s) 98.52% (4.74s) 97.3% (2.95s) 79.01% (33.46s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Logistic Regression(88.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.57%) ANN(88.74%) After PCA After PCA After PCA 96.1817 % (18.54) 96.2044 % (0.70) 62.6037 % (346.38) 98.0970% (2.84) 50.6233 % (209.09) 97.7011 % (0.56) 97.8608 % (1.50) 77.3865 % (4.94)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.
	Default Forecast An Approach for Prediction of Loan Approval using Machine Learning Algorithm Credit card fraud detection using Machine Learning Techniques: A Comparative Analysis Credit card fraud detection using artificial neural network A Comparative Study and enhancement of classification techniques using Principal Component Analysis for credit card dataset Prediction of credit card defaults through data analysis and machine learning techniques Loan Default Risk Assessment using Supervised Learning Model Accuracies & Time MODELS (Balanced Classes) Random Forest Decision Tree SVM KNN Gausian Naive Bayes ANN XG Boost LGBM Logistic Regression MIP	Chuntian Luo Shengjia Cao Peng Guo Jianjun Zhang Mohammad Ahmad Sheikh Amit Kumar Goel Tapas Kumar John O. Awoyemi Adebayo O. Adetunmbi Samuel A. Oluwadare Asha RB Suresh kumar KR Abhishek Agarwal Amit Rana Karan Gupta Neeta Verma Saurabh Arora Sushant Bindra Survesh Singh Vinay Kumar Nassa Anushi Jain Shiwangi Gupta Mandeep Singh Narula Paken (in seconds) Before PCA 96.62% (7.27s) 95.12% (58.20s) 93.89% (0.30s) 93.89% (0.26s) 51.54% (209.16s) 98.52% (4.74s) 97.3% (2.95s) 79.01% (33.46s) 97.43% (1.95s)	Decision Tree(80%) Logistic Regression(80%) Logistic Regression(81%) Naive Bayes(97.6%) KNN(97.9%) Logistic Regression(54%) Support Vector Machines(93%) K-Nearest Neighbour(99.82%) Artificial Neural Network(99.92%) Logistic Regression Random Forest Decision Trees Naive Bayes KNN KNN(79%) Decision Tree Random Forest(80%) Logistic Regression(81%) SVM(82%) Naive Bayes(76%) Naive Bayes(76%) Logistic Regression(88.89%) SVM(73.02%) Random Forest(88.85%) XG Boost(88.57%) ANN(88.74%) After PCA 96.1871 % (18.54) 96.2044 % (0.70) 62.6037 % (346.38) 98.9979% (2.84) 50.6233 % (209.09) 97.7011 % (0.56) 97.8608 % (1.50) 77.3865 % (4.94) 57.8150% (12.95)	decision tree and logistic regression classification algorithm in predicting performance on this data set. Hybrid Sampling is used to handle imbalanced data Main motive is to compare the performance measures between original dataset and original dataset on which principal component is applied. Accuracy of LR was best in both(before and after PCA) cases.