# Model Performance Metrics - Sans Equilibrage

## Logistic Regression

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| --- | --- |
| Metric | Value |
| F1 Score | 0.684931506849315 |
| Accuracy | 0.9991893701758714 |
| Precision | 0.8928571428571429 |
| Recall | 0.5555555555555556 |
| Log Loss | 0.004344975987865291 |
| AUC | 0.966223642097336 |
| MCC | 0.7039497636116164 |
| Balanced Accuracy | 0.7777248266340331 |
| Kappa | 0.684547705839729 |
| Specificity | 0.9998940977125106 |
| F2 Score | 0.6009615384615384 |

## Random Forest

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| Metric | Value |
| F1 Score | 0.8354430379746836 |
| Accuracy | 0.9995418179254926 |
| Precision | 0.9705882352941176 |
| Recall | 0.7333333333333333 |
| Log Loss | 0.008835561764346352 |
| AUC | 0.9311618461514325 |
| MCC | 0.84345713121381 |
| Balanced Accuracy | 0.8666490162854183 |
| Kappa | 0.8352180814302315 |
| Specificity | 0.9999646992375035 |
| F2 Score | 0.7710280373831776 |

## Support Vector Machine (SVC)

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| Metric | Value |
| F1 Score | 0.7785234899328859 |
| Accuracy | 0.9994184612131252 |
| Precision | 0.9830508474576272 |
| Recall | 0.6444444444444445 |
| Log Loss | 0.003941680463386318 |
| AUC | 0.9175940961435878 |
| MCC | 0.7957012787221598 |
| Balanced Accuracy | 0.8222133970315981 |
| Kappa | 0.7782449570337452 |
| Specificity | 0.9999823496187518 |
| F2 Score | 0.6921241050119332 |

## Gradient Boosting

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| Metric | Value |
| F1 Score | 0.7402597402597403 |
| Accuracy | 0.9992951045007578 |
| Precision | 0.890625 |
| Recall | 0.6333333333333333 |
| Log Loss | 0.012302756054984713 |
| AUC | 0.7664991841601556 |
| MCC | 0.7507221916788531 |
| Balanced Accuracy | 0.8166048903322978 |
| Kappa | 0.7399168867025598 |
| Specificity | 0.9998764473312624 |
| F2 Score | 0.6721698113207547 |

## Decision Tree

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| Metric | Value |
| F1 Score | 0.6881720430107527 |
| Accuracy | 0.9989779015260988 |
| Precision | 0.6666666666666666 |
| Recall | 0.7111111111111111 |
| Log Loss | 0.03684016312284227 |
| AUC | 0.8552731494555839 |
| MCC | 0.6880199280047687 |
| Balanced Accuracy | 0.8552731494555839 |
| Kappa | 0.6876606883849605 |
| Specificity | 0.9994351878000565 |
| F2 Score | 0.7017543859649122 |

## Gaussian Naive Bayes

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| Metric | Value |
| F1 Score | 0.10252707581227437 |
| Accuracy | 0.9780953723610475 |
| Precision | 0.054826254826254826 |
| Recall | 0.7888888888888889 |
| Log Loss | 0.5631315837178771 |
| AUC | 0.9552725611095423 |
| MCC | 0.20446135818250122 |
| Balanced Accuracy | 0.8836424111205246 |
| Kappa | 0.09985733812777964 |
| Specificity | 0.9783959333521604 |
| F2 Score | 0.21450151057401812 |

## XGBoost

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| Metric | Value |
| F1 Score | 0.8227848101265823 |
| Accuracy | 0.9995065731505305 |
| Precision | 0.9558823529411765 |
| Recall | 0.7222222222222222 |
| Log Loss | 0.003411293334756899 |
| AUC | 0.9647639555681069 |
| MCC | 0.8306565606062497 |
| Balanced Accuracy | 0.8610846355392388 |
| Kappa | 0.8225425492325569 |
| Specificity | 0.9999470488562553 |
| F2 Score | 0.7593457943925234 |