## Logistic Regression

|  |  |
| --- | --- |
| Metric | Value |
| F1 Score | 0.10126582278481013 |
| Accuracy | 0.9749762097769006 |
| Precision | 0.053691275167785234 |
| Recall | 0.8888888888888888 |
| Log Loss | 0.11032918046598844 |
| AUC | 0.9766996336565315 |
| MCC | 0.21501859849845628 |
| Balanced Accuracy | 0.9320009256644388 |
| Kappa | 0.09856933311019245 |
| Specificity | 0.9751129624399887 |
| F2 Score | 0.21621621621621623 |
| Training Time (seconds) | 6.525672500021756 |

## Decision Tree

|  |  |
| --- | --- |
| Metric | Value |
| F1 Score | 0.4870848708487085 |
| Accuracy | 0.9975504881401333 |
| Precision | 0.36464088397790057 |
| Recall | 0.7333333333333333 |
| Log Loss | 0.08828935644956995 |
| AUC | 0.8656517697448931 |
| MCC | 0.5160938711606503 |
| Balanced Accuracy | 0.8656517697448931 |
| Kappa | 0.48599590787865643 |
| Specificity | 0.9979702061564529 |
| F2 Score | 0.609981515711645 |
| Training Time (seconds) | 102.80899849999696 |

## Gaussian Naive Bayes

|  |  |
| --- | --- |
| Metric | Value |
| F1 Score | 0.09681697612732096 |
| Accuracy | 0.9759983082508018 |
| Precision | 0.05148095909732017 |
| Recall | 0.8111111111111111 |
| Log Loss | 0.5779914380172899 |
| AUC | 0.9559076806614578 |
| MCC | 0.200730430214501 |
| Balanced Accuracy | 0.8936856741661175 |
| Kappa | 0.0941149769014008 |
| Specificity | 0.976260237221124 |
| F2 Score | 0.20528683914510687 |
| Training Time (seconds) | 0.6451614999677986 |

## XGBoost

|  |  |
| --- | --- |
| Metric | Value |
| F1 Score | 0.7700534759358288 |
| Accuracy | 0.9992422373383146 |
| Precision | 0.7422680412371134 |
| Recall | 0.8 |
| Log Loss | 0.0038645919424632634 |
| AUC | 0.9729172550127083 |
| MCC | 0.7702161017880697 |
| Balanced Accuracy | 0.899779370234397 |
| Kappa | 0.769674501951191 |
| Specificity | 0.9995587404687941 |
| F2 Score | 0.787746170678337 |
| Training Time (seconds) | 10.332288200035691 |

## Random Forest

|  |  |
| --- | --- |
| Metric | Value |
| F1 Score | 0.8433734939759037 |
| Accuracy | 0.9995418179254926 |
| Precision | 0.9210526315789473 |
| Recall | 0.7777777777777778 |
| Log Loss | 0.007712857045387531 |
| AUC | 0.958275871536603 |
| MCC | 0.846169174068111 |
| Balanced Accuracy | 0.8888359377451442 |
| Kappa | 0.8431457016022273 |
| Specificity | 0.9998940977125106 |
| F2 Score | 0.8027522935779816 |
| Training Time (seconds) | 637.6621017999714 |

## Gradient Boosting

|  |  |
| --- | --- |
| Metric | Value |
| F1 Score | 0.17067833698030635 |
| Accuracy | 0.9866422302893596 |
| Precision | 0.09466019417475728 |
| Recall | 0.8666666666666667 |
| Log Loss | 0.05866151814043704 |
| AUC | 0.9812623552668738 |
| MCC | 0.28391773258001546 |
| Balanced Accuracy | 0.9267497411277417 |
| Kappa | 0.16829993640066765 |
| Specificity | 0.9868328155888167 |
| F2 Score | 0.3293918918918919 |
| Training Time (seconds) | 1699.0204636000562 |

## Support Vector Machine (SVC)

|  |  |
| --- | --- |
| Metric | Value |
| F1 Score | 0.14601344860710855 |
| Accuracy | 0.9843336975293413 |
| Precision | 0.07991587802313355 |
| Recall | 0.8444444444444444 |
| Log Loss | 0.046673153739886696 |
| AUC | 0.9388579026640309 |
| MCC | 0.25698692604468193 |
| Balanced Accuracy | 0.9145001804261195 |
| Kappa | 0.14353158225119456 |
| Specificity | 0.9845559164077944 |
| F2 Score | 0.2898550724637681 |
| Training Time (seconds) | 22948.700561500038 |