|  |  |
| --- | --- |
| **Model** | **Accuracy** |
| Logistic Regression | 82.05 |
| Decision Tree | 92.31 |
| Random Forest | 89.74 |
| SVM | 84.62 |
| K-Nearest Neighbors | 89.74 |
| Naive Bayes | 69.23 |
| Neural Network | 82.05 |
| Gradient Boosting | 94.87 |
| Linear Discriminant Analysis | 82.05 |
| Gaussian Process | 92.31 |
| Extra Trees | 92.31 |
| Bagging | 92.31 |
| AdaBoost | 82.05 |
| CatBoost | 89.74 |

Accuracy before smote and pca

|  |  |
| --- | --- |
| **Model** | **Accuracy** |
| Logistic Regression | 81.36 |
| Decision Tree | 94.92 |
| Random Forest | 96.61 |
| SVM | 83.05 |
| K-Nearest Neighbors | 94.92 |
| Naive Bayes | 84.75 |
| Neural Network | 94.92 |
| Gradient Boosting | 94.92 |
| Linear Discriminant Analysis | 77.97 |
| Gaussian Process | 96.61 |
| Extra Trees | 96.61 |
| Bagging | 94.92 |
| AdaBoost | 88.14 |
| CatBoost | 96.61 |

Accuracy after smote and pca

|  |  |
| --- | --- |
| **Model** | **Accuracy** |
| Logistic Regression | 77.97 |
| Decision Tree | 89.83 |
| Random Forest | 96.61 |
| SVM | 81.36 |
| K-Nearest Neighbors | 86.44 |
| Naive Bayes | 76.27 |
| Neural Network | 81.36 |
| Gradient Boosting | 96.61 |
| Linear Discriminant Analysis | 86.44 |
| Gaussian Process | 88.14 |
| Extra Trees | 96.61 |
| Bagging | 93.22 |
| AdaBoost | 89.83 |
| CatBoost | 94.92 |

Accuracy after SMOTE

|  |  |
| --- | --- |
| **Model** | **Accuracy** |
| Logistic Regression | 82.05 |
| Decision Tree | 82.05 |
| Random Forest | 79.49 |
| SVM | 84.62 |
| K-Nearest Neighbors | 87.18 |
| Naive Bayes | 74.36 |
| Neural Network | 87.18 |
| Gradient Boosting | 79.49 |
| Linear Discriminant Analysis | 82.05 |
| Gaussian Process | 84.62 |
| Extra Trees | 82.05 |
| Bagging | 82.05 |
| AdaBoost | 84.62 |
| CatBoost | 79.49 |

Accuracy after PCA