**Training Performance**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters | NB | LR | DT | SVM | LDA | KNN | AB | RF | VC | SGD | BC | GB |
| Precision | 0.96 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.0 | 1.0 | 1.0 | 0.99 | 1.0 | 1.0 |
| Recall or Sensitivity | 0.94 | 0.98 | 0.95 | 0.98 | 0.95 | 0.96 | 1.0 | 1.0 | 0.98 | 0.99 | 0.99 | 1.0 |
| Specificity | 0.94 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.0 | 1.0 | 1.0 | 0.99 | 1.0 | 1.0 |
| F1-Score | 0.95 | 0.99 | 0.97 | 0.99 | 0.97 | 0.98 | 1.0 | 1.0 | 0.99 | 0.99 | 0.99 | 1.0 |
| False Discovery Rate (FDR) | 0.038 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.0 | 0.0 | 0.0 | 0.006 | 0.0 | 0.0 |
| False Omission Rate (FOR) | 0.095 | 0.025 | 0.08 | 0.025 | 0.08 | 0.05 | 0.0 | 0.0 | 0.025 | 0.015 | 0.015 | 0.0 |

**Testing Performance**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters | NB | LR | DT | SVM | LDA | KNN | AB | RF | VC | SGD | BC | GB |
| Precision | 0.95 | 0.93 | 0.88 | 0.93 | 0.95 | 0.98 | 0.88 | 0.95 | 0.93 | 0.84 | 0.93 | 0.93 |
| Recall or Sensitivity | 1.0 | 1.0 | 1.0 | 1.0 | 0.95 | 0.98 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Specificity | 0.87 | 0.82 | 0.73 | 0.82 | 0.86 | 0.93 | 0.74 | 0.88 | 0.82 | 0.67 | 0.82 | 0.82 |
| F1-Score | 0.97 | 0.96 | 0.93 | 0.96 | 0.95 | 0.98 | 0.94 | 0.98 | 0.96 | 0.91 | 0.96 | 0.96 |
| False Discovery Rate (FDR) | 0.04 | 0.06 | 0.11 | 0.06 | 0.046 | 0.02 | 0.116 | 0.04 | 0.069 | 0.163 | 0.069 | 0.069 |
| False Omission Rate (FOR) | 0.0 | 0.0 | 0.0 | 0.0 | 0.14 | 0.07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**Training Accuracy**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters | NB | LR | DT | SVM | LDA | KNN | AB | RF | VC | SGD | BC | GB |
| Accuracy | 93.94 | 98.83 | 96.68 | 98.83 | 96.68 | 97.85 | 100 | 100 | 99.02 | 99.02 | 99.41 | 100 |
| Cross validation | 93.15 | 97.91 | 93.75 | 97.85 | 96.49 | 96.68 | 96.29 | 96.03 | 97.93 | 96.88 | 95.51 | 96.29 |

**Testing Accuracy**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters | NB | LR | DT | SVM | LDA | KNN | AB | RF | VC | SGD | BC | GB |
| Accuracy | 96.49 | 94.74 | 91.23 | 94.74 | 92.98 | 96.49 | 91.23 | 96.49 | 94.74 | 87.72 | 94.74 | 94.74 |
| Cross validation | 95.0 | 96.67 | 91.67 | 93.07 | 90.0 | 93.07 | 91.48 | 96.67 | 94.67 | 98.33 | 94.6 | 91.67 |