|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Testing**  **Method** | **Testing Mode** | **Sn (%)** | **Sp (%)** | **ACC (%)** | **MCC** | **AUROC** |
| **Supervised Machine Learning** | | | | | | |
| **Support Vector Machine** | Cross-validation | 0.7814 | 0.6186 | 0.6992 | 0.4029 | 0.7625 |
| Independent test set | 0.7736 | 0.6415 | 0.7075 | 0.4187 | 0.7237 |
| **Random**  **Forest** | Cross-validation | 0.7116 | 0.6093 | 0.6589 | 0.3192 | 0.7325 |
| Independent test set | 0.6346 | 0.7169 | 0.6698 | 0.3529 | 0.7281 |
| **Naive**  **Bayes** | Cross-validation | 0.6372 | 0.6930 | 0.6604 | 0.3224 | 0.7520 |
| Independent test set | 0.6038 | 0.7547 | 0.6792 | 0.3626 | 0.7501 |
| **Gradient Boosting Machine** | Cross-validation | 0.7581 | 0.6372 | 0.6814 | 0.3640 | **0.7650** |
| Independent test set | 0.6603 | 0.7358 | 0.6981 | 0.3973 | **0.7538** |
| **Conditional Inference Trees** | Cross-validation | 0.7116 | 0.6093 | 0.6589 | 0.3192 | 0.7325 |
| Independent test set | 0.6346 | 0.7169 | 0.6698 | 0.3528 | 0.7281 |
| **Unsupervised Machine Learning** | | | | | | |
| **k-nearest Neighbors** | Cross-validation | 0.6511 | 0.6511 | 0.6612 | 0.3224 | 0.7269 |
| Independent test set | 0.6981 | 0.6603 | 0.6792 | 0.3587 | 0.7265 |
| **Principle Component Analysis** | Cross-validation | 0.8000 | 0.5581 | 0.6770 | 0.3564 | 0.7442 |
| Independent test set | 0.6603 | 0.6981 | 0.6792 | 0.3587 | 0.7166 |
| **Deep Learning** | | | | | | |
| **Fully Connected Layer** | Cross-validation | 0.8232 | 0.5069 | 0.6726 | 0.3474 | 0.7173 |
| Independent test set | 0.7169 | 0.6226 | 0.6698 | 0.3411 | 0.7230 |