The performances of the proposed DT-M framework and the LCDT-M framework are compared with the existing work in terms of detection rate and error for validation. The results are recorded and shown in table 1.

**Table 7 Performance Comparison with Existing Work**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Local** | | | **Global** | | |
| **Existing** | **DT-M** | **LCDT-M** | **Existing** | **DT-M** | **LCDT-M** |
| Detection rate (%) | 86.56 | 88.80 | 94.75 | 89.30 | 98.77 | 99.93 |
| Error rate (%) | 13.44 | 11.20 | 5.25 | 10.70 | 1.23 | 0.07 |

The performances of the proposed DT-M framework and the LCDT-M framework are compared with existing methods[31] namely, SVM, DT, NB, ANN, and USML, in terms of accuracy, False Alarm Rate (FAR), sensitivity, specificity, Mathew’s Correlation Coefficient (MCC), and Area Under Curve (AUC) for validation. The results are recorded and shown in table 7.2.

**Table 2. Performance Comparison with Existing Methods5**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **SVM** | **DT** | **NB** | **ANN** | **USML** | **Proposed DTD** | **Proposed LCDT-M** |
| **Accuracy (%)** | 91.55 | 93.30 | 96.74 | 97.44 | 98.08 | 98.42 | 99.83 |
| **FAR (%)** | 8.45 | 6.70 | 3.26 | 2.56 | 1.92 | 1.58 | 0.17 |
| **Sensitivity (%)** | 90.13 | 93.14 | 98.21 | 84.89 | 91.88 | 98.84 | 99.93 |
| **Specificity (%)** | 9.87 | 6.86 | 1.71 | 15.11 | 8.12 | 94.30 | 98.79 |
| **MCC (%)** | 10.46 | 5.48 | 10.42 | 14.46 | 1.48 | 90.26 | 98.97 |
| **AUC (%)** | 89.54 | 94.52 | 89.58 | 85.54 | 98.52 | 98.90 | 99.60 |