**Result Analysis OR Screenshots:**

These are the performance results for the trained models on the given datasets.

**CICIDS 2017**

**- Monday**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **Accuracy** | **Precision** | **Recall** | **F1-Score** |
| **Decision Tree** | 0.9997 | 1.00/0.99 | 1.00/0.98 | 1.00/0.99 |
| **Random Forest** | 0.9995 | 1.00/1.00 | 1.00/0.96 | 1.00/0.98 |
| **Logistic Regression** | 0.9941 | 1.00/0.77 | 1.00/0.61 | 1.00/0.68 |
| **SVM** | 0.9952 | 1.00/0.89 | 1.00/0.60 | 1.00/0.72 |
| **Gaussian Naive Bayes** | 0.7973 | 1.00/0.05 | 0.80/1.00 | 0.89/0.09 |
| **CNN** | 0.9962 | 0.9963 | 0.9962 | 0.9962 |

**- Tuesday**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **Accuracy** | **Precision** | **Recall** | **F1-Score** |
| **Decision Tree** | 0.9954 | 0.67 | 0.73 | 0.69 |
| **Random Forest** | 0.9953 | 0.7 | 0.65 | 0.67 |
| **Logistic Regression** | 0.9913 | 0.63 | 0.46 | 0.42 |
| **SVM** | 0.9905 | 0.62 | 0.46 | 0.42 |
| **Gaussian Naive Bayes** | 0.9878 | 0.42 | 0.77 | 0.47 |
| **CNN** | 0.9932 | 0.9933 | 0.9932 | 0.9932 |

**-Wednesday**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **Accuracy** | **Precision** | **Recall** | **F1-Score** |
| **Decision Tree (DT)** | 0.9961 | 0.9962 | 0.9961 | 0.9961 |
| **Random Forest (RF)** | 0.9997 | 0.9997 | 0.9997 | 0.9997 |
| **Logistic Regression** | 0.9719 | 0.9731 | 0.9719 | 0.9719 |
| **SVM** | 0.981 | 0.981 | 0.981 | 0.981 |
| **Gaussian NB (GNB)** | 0.7627 | 0.8054 | 0.7627 | 0.742 |
| **CNN** | 0.9801 | 0.9802 | 0.9801 | 0.9801 |

**-Thursday**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **Accuracy** | **Precision** | **Recall** | **F1-Score** |
| **Decision Tree** | 0.9954 | 0.67 | 0.73 | 0.69 |
| **Random Forest** | 0.9953 | 0.7 | 0.65 | 0.67 |
| **Logistic Regression** | 0.9913 | 0.63 | 0.46 | 0.42 |
| **SVM** | 0.9905 | 0.62 | 0.46 | 0.42 |
| **Gaussian Naive Bayes** | 0.9878 | 0.42 | 0.77 | 0.47 |
| **CNN** | 0.9932 | 0.9933 | 0.9932 | 0.9932 |

**- Friday**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **Accuracy** | **Precision** | **Recall** | **F1-Score** |
| **Decision Tree** | 0.9997 | 1 | 1 | 1 |
| **Random Forest** | 0.9995 | 1 | 1 | 1 |
| **Logistic Regression** | 0.9941 | 1 | 1 | 1 |
| **SVM** | 0.9952 | 1 | 1 | 1 |
| **Gaussian Naive Bayes** | 0.7973 | 1 | 0.8 | 0.89 |
| **CNN** | 0.9962 | 0.9963 | 0.9962 | 0.9962 |