# CICIDS2017 - Model Evaluation Summary

This table summarizes the performance of the top symbolic models.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Model** | **Symbolic Rank** | **Symbolic Score** | **ROC AUC** | **Average Precision** | **Accuracy** | **F1 (Minority)** | **Precision (Minority)** | **Recall (Minority)** | **F1 Rank** | **ROC AUC Rank** | **AP Rank** | **Accuracy Rank** |
| IForest | 1 | 4.2 | 0.6534 | 0.3189 | 0.8062 | 0.3204 | 0.4566 | 0.2468 | 2 | 1 | 2 | 2 |
| SO\_GAAL | 2 | 3.1 | 0.6241 | 0.352 | 0.8213 | 0.3676 | 0.5331 | 0.2805 | 1 | 2 | 1 | 1 |
| MO\_GAAL | 2 | 3.1 | 0.6189 | 0.3134 | 0.7871 | 0.2531 | 0.3609 | 0.1949 | 3 | 3 | 3 | 3 |
| LUNAR | 2 | 3.1 | 0.4751 | 0.1941 | 0.762 | 0.1656 | 0.236 | 0.1276 | 4 | 4 | 4 | 5 |
| LOF | 3 | 2.0 | 0.4607 | 0.1871 | 0.7652 | 0.1464 | 0.2239 | 0.1088 | 5 | 5 | 5 | 4 |