| **Source** | **Model** | **SamplesUsed** | **Accuracy** | **Precision** | **F1 Score** |
| --- | --- | --- | --- | --- | --- |
| **Our Work** | SVM | 30,602 | 98.56% | 99.86% | 99.02% |
| [31] | SVM | 3,941 | 90.87% | 94.5% | 86% |
| [32] | SVM | 30,920 | 80.83% | N/A | 36.86% |
| **Our Work** | LR | 30,602 | 98.12% | 99.72% | 97.44% |
| [31] | LR | 3,941 | 90.74% | 93% | 86% |
| [32] | LR | 30,920 | 93.69% | N/A | 85.55% |
| **Our Work** | MLP | 30,602 | 99.44% | 99.51% | 99.25% |
| [33] | MLP | 4,200 | 97.74% | 92.99% | N/A |
| [34] | MLP | 4,200 | 97.98% | 94.01% | N/A |
| **Our Work** | RNN | 30,602 | 99.06% | 100% | 98.74% |
| Maha Alghawazi et al. (2023) | RNN | 30,907 | 94% | 90% | 92% |
| **Our Work** | LSTM | 30,602 | 99.62% | 99.73% | 99.49% |
| [36] | LSTM | 30,907 | 96.42% | 99.62% | 96.34% |

Fi blast maha elgawi (<https://www.mdpi.com/2227-7390/11/15/3286>)

Resultasttbdl

Pdf 2

Lstm

* **Accuracy (Précision globale)** : **0.90119** (90.12%)

**Precision** :  (91.25%)

* **F1-Score**  (80.51%)
* Dataset (30,919 )