TABLE 10

# Comparison of the Proposed System with Similar Diabetes Prediction Works

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| --- | --- | --- | --- | --- |
| Reference | Classifier | F1 Score | Accuracy | Other Metrics |
| [3] | Deep belief network model | 0.81 | N/A | Precision: 0.68 Recall: 1.0 |
| [5] | SVM with RBF kernel | 82% |  |  |
| [9] | SVM | 0.73 | 75% | Precision: 0.72 Recall: 0.75 |
| [10] | Ensemble (XGBoost) | 0.81 | 88.8% | Precision: 0.84 Recall: 0.79 |
| [21] | Soft voting | 0.72 | 79.1% | Precision: 0.73 Recall: 0.72 |
| This work | XGBoost with ADASYN | 0.81 | 88.5% | Precision: 0.82 Recall: 0.80 |