# Simulation Results by RHO Value

## Results for RHO = 0

| **Model** | **Avg\_Accuracy** | **Avg\_Precision** | **Avg\_Recall** | **Avg\_F1\_Score** | **Avg\_Specificity** | **Avg\_Kappa** |
| --- | --- | --- | --- | --- | --- | --- |
| KNN | 0.8328667 | 0.8457255 | 0.8249333 | 0.8303438 | 0.8408000 | 0.6657333 |
| LDA | 0.8558000 | 0.8638072 | 0.8538667 | 0.8546266 | 0.8577333 | 0.7116000 |
| NN | 0.8072667 | 0.8192914 | 0.7998667 | 0.8047092 | 0.8146667 | 0.6145333 |
| RF | 0.8376667 | 0.8476366 | 0.8362667 | 0.8365262 | 0.8390667 | 0.6753333 |
| SVM | 0.8442000 | 0.8552089 | 0.8404000 | 0.8426912 | 0.8480000 | 0.6884000 |

## Results for RHO = 0.2

| **Model** | **Avg\_Accuracy** | **Avg\_Precision** | **Avg\_Recall** | **Avg\_F1\_Score** | **Avg\_Specificity** | **Avg\_Kappa** |
| --- | --- | --- | --- | --- | --- | --- |
| KNN | 0.7892000 | 0.7987346 | 0.7874667 | 0.7870575 | 0.7909333 | 0.5784000 |
| LDA | 0.8195333 | 0.8296103 | 0.8153333 | 0.8172248 | 0.8237333 | 0.6390667 |
| NN | 0.7618667 | 0.7696848 | 0.7604000 | 0.7592484 | 0.7633333 | 0.5237333 |
| RF | 0.7979333 | 0.8070129 | 0.7977333 | 0.7962697 | 0.7981333 | 0.5958667 |
| SVM | 0.8056667 | 0.8171664 | 0.8021333 | 0.8032867 | 0.8092000 | 0.6113333 |

## Results for RHO = 0.5

| **Model** | **Avg\_Accuracy** | **Avg\_Precision** | **Avg\_Recall** | **Avg\_F1\_Score** | **Avg\_Specificity** | **Avg\_Kappa** |
| --- | --- | --- | --- | --- | --- | --- |
| KNN | 0.7138667 | 0.7216565 | 0.7134667 | 0.7101874 | 0.7142667 | 0.4277333 |
| LDA | 0.7593333 | 0.7671399 | 0.7590667 | 0.7573560 | 0.7596000 | 0.5186667 |
| NN | 0.6940667 | 0.7003717 | 0.6973333 | 0.6913894 | 0.6908000 | 0.3881333 |
| RF | 0.7343333 | 0.7416972 | 0.7354667 | 0.7320835 | 0.7332000 | 0.4686667 |
| SVM | 0.7408667 | 0.7484706 | 0.7450667 | 0.7390538 | 0.7366667 | 0.4817333 |

## Results for RHO = 0.9

| **Model** | **Avg\_Accuracy** | **Avg\_Precision** | **Avg\_Recall** | **Avg\_F1\_Score** | **Avg\_Specificity** | **Avg\_Kappa** |
| --- | --- | --- | --- | --- | --- | --- |
| KNN | 0.6309333 | 0.6395435 | 0.6242667 | 0.6249497 | 0.6376000 | 0.2618667 |
| LDA | 0.6879333 | 0.6961009 | 0.6841333 | 0.6839463 | 0.6917333 | 0.3758667 |
| NN | 0.6227333 | 0.6302894 | 0.6256000 | 0.6191286 | 0.6198667 | 0.2454667 |
| RF | 0.6462667 | 0.6543788 | 0.6421333 | 0.6403920 | 0.6504000 | 0.2925333 |
| SVM | 0.6670000 | 0.6771317 | 0.6637333 | 0.6615962 | 0.6702667 | 0.3340000 |