| Model                  | Metrics       | Hyperparameter Tuning       |
|------------------------|---------------|-----------------------------|
| LSTM                   | 1. MSE/RMSE   | 1. Number of layers         |
|                        | 2. AUC-ROC    | 2. Number of units per      |
|                        | 3. Precision, | layer                       |
|                        | Recall, F1-   | 3. Dropout rate             |
|                        | Score         | 4. Batch size               |
|                        |               | 5. Optimizer                |
|                        |               | 6. Learning rate            |
| Autoencoders           | 1. MSE/RMSE   | 1. Number of hidden layers  |
|                        | 2. AUC-ROC    | 2. Number of neurons per    |
|                        | 3. Precision, | layer                       |
|                        | Recall, F1-   | 3. Learning rate Activation |
|                        | Score         | function                    |
|                        |               | 4. Batch size               |
|                        |               | 5. Loss function            |
| Feed-Forward           | 1. MSE/RMSE   | 1. Number of hidden layers  |
| <b>Neural Networks</b> | 2. AUC-ROC    | 2. Number of neurons per    |
|                        | 3. Precision, | layer                       |
|                        | Recall, F1-   | 3. Learning rate            |
|                        | Score         | 4. Activation function      |
|                        |               | 5. Batch size               |
|                        |               | 6. Optimizer                |
| <b>Gradient Boost</b>  | 1. MSE/RMSE   | 1. Number of trees          |
| <b>Neural Networks</b> | 2. AUC-ROC    | Learning rate               |
|                        | 3. Precision, | 2. Maximum depth of trees   |
|                        | Recall, F1-   | 3. Subsample ratio          |
|                        | Score         | Minimum samples split       |
|                        |               | 4. Regularization           |
|                        |               | parameters                  |