# Table 15: Performance Metrics of the Random Forest Model

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| param\_n\_estimators | param\_max\_depth | param\_min\_samples\_split | param\_min\_samples\_leaf | param\_criterion | mean\_test\_accuracy | mean\_test\_precision | mean\_test\_recall | mean\_test\_f1 | rank\_test\_accuracy |
| 100 | 10 | 5 | 1 | gini | 0.958524 | 0.935297 | 0.98577 | 0.959741 | 1 |
| 50 | 10 | 5 | 1 | gini | 0.958516 | 0.935277 | 0.98577 | 0.959729 | 2 |
| 200 | 20 | 10 | 1 | gini | 0.958516 | 0.935277 | 0.98577 | 0.959729 | 2 |
| 200 | 10 | 10 | 2 | gini | 0.958516 | 0.935295 | 0.98577 | 0.959715 | 2 |
| 100 | 10 | 10 | 1 | log\_loss | 0.957333 | 0.933172 | 0.985742 | 0.958585 | 7 |
| 100 | 10 | 10 | 1 | entropy | 0.957333 | 0.933172 | 0.985742 | 0.958585 | 7 |
| 200 | 10 | 2 | 2 | gini | 0.957333 | 0.935127 | 0.983417 | 0.958534 | 11 |
| 200 | 10 | 10 | 1 | log\_loss | 0.957326 | 0.935082 | 0.983389 | 0.958521 | 12 |
| 200 | 20 | 10 | 1 | log\_loss | 0.957326 | 0.935082 | 0.983389 | 0.958521 | 12 |
| 200 | 10 | 10 | 1 | entropy | 0.957326 | 0.935082 | 0.983389 | 0.958521 | 12 |