# Table 13: Performance Metrics of the Decision Tree Model

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| param\_criterion | param\_max\_depth | param\_min\_samples\_split | param\_min\_samples\_leaf | mean\_test\_accuracy | mean\_test\_precision | mean\_test\_recall | mean\_test\_f1 | rank\_test\_accuracy |
| entropy | 20 | 10 | 1 | 0.936017 | 0.932504 | 0.9407 | 0.936201 | 1 |
| log\_loss | 20 | 10 | 1 | 0.936017 | 0.932504 | 0.9407 | 0.936201 | 1 |
| entropy | 20 | 2 | 1 | 0.932474 | 0.940367 | 0.924146 | 0.931533 | 5 |
| log\_loss | 20 | 2 | 1 | 0.932474 | 0.940367 | 0.924146 | 0.931533 | 5 |
| entropy | 20 | 10 | 4 | 0.932467 | 0.932324 | 0.933669 | 0.932507 | 9 |
| log\_loss | 20 | 10 | 4 | 0.932467 | 0.932324 | 0.933669 | 0.932507 | 9 |
| log\_loss | 10 | 10 | 1 | 0.9301 | 0.915843 | 0.947815 | 0.931391 | 13 |
| entropy | 10 | 10 | 1 | 0.9301 | 0.915843 | 0.947815 | 0.931391 | 13 |
| log\_loss | 20 | 2 | 4 | 0.928924 | 0.933829 | 0.924146 | 0.928365 | 15 |
| log\_loss | 20 | 5 | 4 | 0.928924 | 0.933829 | 0.924146 | 0.928365 | 15 |