W

Using Gini

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.37 | 0.59 | 0.46 |
| 2.0 | 2.0 | 0.46 | 0.64 | 0.53 |
| 3.0 | 5.0 | 0.59 | 0.67 | 0.63 |
| 4.0 | 8.0 | 0.66 | 0.61 | 0.63 |
| 5.0 | 10.0 | 0.65 | 0.62 | 0.64 |
| 6.0 | 20.0 | 0.69 | 0.61 | 0.65 |
| 7.0 | 30.0 | 0.71 | 0.62 | 0.66 |
| 8.0 | 50.0 | 0.67 | 0.59 | 0.63 |
| 9.0 | 80.0 | 0.65 | 0.6 | 0.62 |
| 10.0 | 100.0 | 0.72 | 0.61 | 0.66 |

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.66 | 0.92 | 0.77 |
| 2.0 | 2.0 | 0.87 | 0.85 | 0.86 |
| 3.0 | 5.0 | 0.84 | 0.86 | 0.85 |
| 4.0 | 8.0 | 0.85 | 0.86 | 0.85 |
| 5.0 | 10.0 | 0.87 | 0.85 | 0.86 |
| 6.0 | 20.0 | 0.87 | 0.84 | 0.86 |
| 7.0 | 30.0 | 0.87 | 0.85 | 0.86 |
| 8.0 | 50.0 | 0.88 | 0.85 | 0.86 |
| 9.0 | 80.0 | 0.87 | 0.85 | 0.86 |
| 10.0 | 100.0 | 0.86 | 0.85 | 0.85 |

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.69 | 0.86 | 0.77 |
| 2.0 | 2.0 | 0.71 | 0.86 | 0.78 |
| 3.0 | 5.0 | 0.72 | 0.81 | 0.76 |
| 4.0 | 8.0 | 0.75 | 0.8 | 0.78 |
| 5.0 | 10.0 | 0.8 | 0.78 | 0.79 |
| 6.0 | 20.0 | 0.76 | 0.78 | 0.77 |
| 7.0 | 30.0 | 0.8 | 0.79 | 0.79 |
| 8.0 | 50.0 | 0.77 | 0.78 | 0.78 |
| 9.0 | 80.0 | 0.75 | 0.79 | 0.77 |
| 10.0 | 100.0 | 0.77 | 0.79 | 0.78 |

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.62 | 0.9 | 0.73 |
| 2.0 | 2.0 | 0.46 | 0.83 | 0.59 |
| 3.0 | 5.0 | 0.81 | 0.85 | 0.83 |
| 4.0 | 8.0 | 0.83 | 0.84 | 0.83 |
| 5.0 | 10.0 | 0.78 | 0.83 | 0.8 |
| 6.0 | 20.0 | 0.86 | 0.83 | 0.84 |
| 7.0 | 30.0 | 0.85 | 0.83 | 0.84 |
| 8.0 | 50.0 | 0.88 | 0.83 | 0.86 |
| 9.0 | 80.0 | 0.87 | 0.83 | 0.85 |
| 10.0 | 100.0 | 0.88 | 0.84 | 0.86 |

Using Entropy

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.37 | 0.59 | 0.46 |
| 2.0 | 2.0 | 0.43 | 0.64 | 0.52 |
| 3.0 | 5.0 | 0.63 | 0.66 | 0.65 |
| 4.0 | 8.0 | 0.64 | 0.61 | 0.63 |
| 5.0 | 10.0 | 0.65 | 0.64 | 0.64 |
| 6.0 | 20.0 | 0.68 | 0.62 | 0.65 |
| 7.0 | 30.0 | 0.72 | 0.61 | 0.66 |
| 8.0 | 50.0 | 0.72 | 0.6 | 0.66 |
| 9.0 | 80.0 | 0.7 | 0.62 | 0.66 |
| 10.0 | 100.0 | 0.72 | 0.62 | 0.67 |

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.65 | 0.92 | 0.76 |
| 2.0 | 2.0 | 0.87 | 0.85 | 0.86 |
| 3.0 | 5.0 | 0.84 | 0.87 | 0.85 |
| 4.0 | 8.0 | 0.86 | 0.85 | 0.86 |
| 5.0 | 10.0 | 0.88 | 0.85 | 0.86 |
| 6.0 | 20.0 | 0.89 | 0.84 | 0.86 |
| 7.0 | 30.0 | 0.88 | 0.84 | 0.86 |
| 8.0 | 50.0 | 0.88 | 0.84 | 0.86 |
| 9.0 | 80.0 | 0.86 | 0.85 | 0.86 |
| 10.0 | 100.0 | 0.88 | 0.85 | 0.86 |

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.69 | 0.86 | 0.77 |
| 2.0 | 2.0 | 0.74 | 0.85 | 0.79 |
| 3.0 | 5.0 | 0.74 | 0.82 | 0.78 |
| 4.0 | 8.0 | 0.81 | 0.8 | 0.8 |
| 5.0 | 10.0 | 0.82 | 0.79 | 0.8 |
| 6.0 | 20.0 | 0.78 | 0.78 | 0.78 |
| 7.0 | 30.0 | 0.82 | 0.79 | 0.8 |
| 8.0 | 50.0 | 0.76 | 0.79 | 0.78 |
| 9.0 | 80.0 | 0.78 | 0.79 | 0.79 |
| 10.0 | 100.0 | 0.76 | 0.79 | 0.77 |

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| --- | --- | --- | --- | --- |
| k\_neighbors | max\_depth | Precision | Recall | F1-Score |
| 1.0 | 1.0 | 0.62 | 0.9 | 0.73 |
| 2.0 | 2.0 | 0.76 | 0.88 | 0.81 |
| 3.0 | 5.0 | 0.77 | 0.85 | 0.81 |
| 4.0 | 8.0 | 0.84 | 0.84 | 0.84 |
| 5.0 | 10.0 | 0.85 | 0.84 | 0.84 |
| 6.0 | 20.0 | 0.85 | 0.83 | 0.84 |
| 7.0 | 30.0 | 0.87 | 0.83 | 0.85 |
| 8.0 | 50.0 | 0.89 | 0.84 | 0.86 |
| 9.0 | 80.0 | 0.89 | 0.83 | 0.86 |
| 10.0 | 100.0 | 0.87 | 0.84 | 0.85 |