|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criterion** | **Splitter** | **Max\_features** | | **R2 value** |
| ***squared\_error*** | - | auto | | 0.915 |
| Friedman\_mse | best | auto | | 0.891 |
| Friedman\_mse | random | auto | | 0.936 |
| Absolute\_error | best | auto | | 0.935 |
| Absolute\_error | random | auto | | 0.907 |
| poission | best | auto | | 0.922 |
| poission | random | auto | | 0.947 |
| poission | random | Max\_depth | | 0.955 |
| poission | random | Min\_sample\_depth=2 | | 0.960 |
| poission | best | Min\_sample\_depth=2 | | 0.917 |
| poission | random | min\_samples\_leaf=1 | | 0.949 |
| poission | best | min\_samples\_leaf=1 | | 0.933 |
| poission | best | min\_weight\_fraction\_leaf=0.0 | | 0.915 |
| poission | random | min\_weight\_fraction\_leaf=0.0 | | 0.873 |
| poission | random | max\_features=None | | 0.905 |
| poission | best | max\_features=None | | 0.929 |
| poission | best | random\_state=None | | 0.904 |
| poission | random | ***random\_state****=None* | | 0.937 |
| poission | random | ***max\_leaf\_nodes****=None* | | 0.851 |
| poission | best | ***max\_leaf\_nodes****=None* | | 0.914 |
| poission | best | ***min\_impurity\_decrease****=0.0* | | 0.929 |
| poission | random | ***min\_impurity\_decrease****=0.0* | | 0.869 |
| poission | random | ***ccp\_alpha****=0.0* | | 0.896 |
| poission | best | ***ccp\_alpha****=0.0* | | 0.911 |
| poission | best | ***max\_depth****=None* | | 0.929 |
| poission | random | ***max\_depth****=None* | | 0.596 |
| Absolute error | random | ***min\_samples\_split=2*** | | 0.725 |
| Absolute error | best | ***min\_samples\_split=2*** | | 0.942 |
| Absolute error | best | Max\_depth | | 0.962 |
| Absolute error | random | Max\_depth | | 0.898 |
| Absolute error | best | ***min\_samples\_leaf=1*** | | 0.948 |
| Absolute error | random | ***min\_samples\_leaf=1*** | | 0.688 |
| Absolute error | best | ***min\_weight\_fraction\_leaf=0.0*** | | 0.951 |
| Absolute error | random | ***min\_weight\_fraction\_leaf=0.0*** | | 0.874 |
| Absolute error | best | ***random\_state=None*** | | 0.942 |
| Absolute error | random | ***random\_state=None*** | | 0.854 |
| Absolute error | best | | ***max\_features****=None* | 0.949 |
| Absolute error | random | | ***max\_features****=None* | 0.859 |
| friedman\_mse | best | | ***max\_features****=None* | 0.924 |
| friedman\_mse | random | | ***max\_features****=None* | 0.950 |
| friedman\_mse | best | | ***max\_depth****=None* | 0.904 |
| friedman\_mse | random | | ***max\_depth****=None* | 0.843 |
| friedman\_mse | best | | ***min\_samples\_split****=2* | 0.908 |
| friedman\_mse | random | | ***min\_samples\_split****=2* | 0.897 |
| friedman\_mse | best | | ***min\_samples\_leaf****=1* | 0.895 |
| friedman\_mse | random | | ***min\_samples\_leaf****=1* | 0.929 |
| friedman\_mse | best | | ***min\_weight\_fraction\_leaf****=0.0* | 0.904 |
| friedman\_mse | random | | ***min\_weight\_fraction\_leaf****=0.0* | 0.697 |
| friedman\_mse | best | | ***random\_state****=None* | 0.940 |
| friedman\_mse | random | | ***random\_state****=None* | 0.864 |

\*In Decision tree regression best r2\_score model is 0.962