

To find following the machine learning regression method using in r2 value

Support Vector Machine:

Hyper Parameter	Linear (r value)	RBF (NON LINEAR) (r value)	POLY (r value)	SIGMOID (r value)
C10	0.0032507218167588947	-0.018572854398117844	- 0.013548290924396467	-0.01585073125893799
C100	0.18028594222761862	- 0.009364909092804297	0.03790719343785909	0.014082351620280265
C500	0.6909091503857931	0.025757743142911016	0.23767422870647104	0.1342409861378877
C1000	0.8768358457857834	0.06707569875923425	0.42979860216196086	0.2674555916309973
C1500	0.9041338590804145	0.1055210325107564	0.5629277708689762	0.387412070235864
C2000	0.9134824554472242	0.14252592069486747	0.6413547699851418	0.46749717430163684
C3000	0.9327761918507149	0.22222282761729706	0.7002573051859722	0.6333540203707144

Decision Tree

No	CRITERION	SPLITTER	MAX FEATURES	R VALUE
1	<i>squared_error</i>	Best	Sqrt	0.11190121577489287
2	<i>squared_error</i>	Random	Sqrt	0.5215950656606722
3	<i>squared_error</i>	Best	Log2	0.5532564048890736
4	<i>squared_error</i>	Random	Log2	0.8242791327576887
5	<i>squared_error</i>	Best	None	0.9434305914234801
6	<i>squared_error</i>	random	None	0.722112465442786
7	<i>friedman_mse</i>	Best	Sqrt	0.8609195941482262
8	<i>friedman_mse</i>	Random	Sqrt	0.4040414182574167
9	<i>friedman_mse</i>	Best	Log2	0.7148469557636871
10	<i>friedman_mse</i>	Random	Log2	0.6727352740736159
11	<i>friedman_mse</i>	Best	None	0.9239341494837059
12	<i>friedman_mse</i>	Random	None	0.7536131993597952
13	<i>absolute_error</i>	Best	Sqrt	0.7832886813068167
14	<i>absolute_error</i>	Random	Sqrt	-0.006254765475538493
15	<i>absolute_error</i>	Best	Log2	0.630129317998698
16	<i>absolute_error</i>	Random	Log2	0.7790760055982111
17	<i>absolute_error</i>	Best	None	0.954536831955183
18	<i>absolute_error</i>	Random	None	0.9439832021837316
19	<i>poisson</i>	Best	Sqrt	0.733944092382905
20	<i>poisson</i>	Random	Sqrt	0.31748948172908287
21	<i>poisson</i>	Best	Log2	-0.16784207774955906
22	<i>poisson</i>	Random	Log2	0.3809113239336448
23	<i>poisson</i>	Best	None	0.9044751320197335
24	<i>poisson</i>	Random	None	0.7518513060621593

Random Forest

Sno	N_ESTIMATORS	CRITERION	MAXFEATURES	R2 VALUE
1	50	<i>squared_error</i>	<i>Sqrt</i>	0.613507251212222
2	100	<i>squared_error</i>	<i>Sqrt</i>	0.6542182765527815
3	50	<i>squared_error</i>	<i>log2</i>	0.7411171186335046
4	100	<i>squared_error</i>	<i>log2</i>	0.6581541160609805
5	50	<i>squared_error</i>	<i>None</i>	0.9273337325000344
6	100	<i>squared_error</i>	<i>None</i>	0.931867564517127
7	50	<i>absolute_error</i>	<i>Sqrt</i>	0.5623380451906549
8	100	<i>absolute_error</i>	<i>Sqrt</i>	0.671127960163293
9	50	<i>absolute_error</i>	<i>log2</i>	0.364164723638725
10	100	<i>absolute_error</i>	<i>log2</i>	0.7024560867970556
11	50	<i>absolute_error</i>	<i>None</i>	0.9351046367368752
12	100	<i>absolute_error</i>	<i>None</i>	0.937206661452639
13	50	<i>friedman_mse</i>	<i>Sqrt</i>	0.5887472438817573
14	100	<i>friedman_mse</i>	<i>Sqrt</i>	0.676496423890452
15	50	<i>friedman_mse</i>	<i>log2</i>	0.6373281492294232
16	100	<i>friedman_mse</i>	<i>log2</i>	0.7478969127755715
17	50	<i>friedman_mse</i>	<i>None</i>	0.9412871586582846
18	100	<i>friedman_mse</i>	<i>None</i>	0.9213152930405965
19	50	<i>Poisson</i>	<i>Sqrt</i>	0.5857417358275465
20	100	<i>Poisson</i>	<i>Sqrt</i>	0.636918295022046
21	50	<i>Poisson</i>	<i>log2</i>	0.47747194551406213
22	100	<i>Poisson</i>	<i>log2</i>	0.5654168179265978
23	50	<i>Poisson</i>	<i>None</i>	0.9363080813745691
24	100	<i>Poisson</i>	<i>None</i>	0.9203362538119148