

R2_score values of Machine Learning Regression models

Multiple Linear Regression : High Accuracy R2 value is → 0.8752655285748308

Support Vector Machine Regression : High Accuracy R2 value is → 0.895674469				
Type of Kernels and its model accuracy values (r2_scores - model accuracy)				
Hyper Parameter Values	Linear	Non-Linear (rbf - Radial Base Function)	Poly	Sigmoid
C=10	0.039644947	-0.056807593	-0.05366721	-0.054719583
C=100	0.106468196	-0.050726023	-0.01980214	-0.030453515
C=500	0.592897727	-0.024323348	0.114684807	0.070572145
C=1000	0.780283988	0.006768344	0.266163709	0.18506862
C=1500	0.856855301	0.03776049	0.387513014	0.294904916
C=2000	0.876772169	0.067515543	0.481002816	0.397065287
C=3000	0.895674469	0.123227566	0.637006422	0.591363021
Decision Tree Regression : High Accuracy R2 value is → 0.9475699408640987				
criterion	splitter	max_features	R_VALUE	
squared_error	best	sqrt	0.7548425034052195	
squared_error	random	sqrt	0.6109434717663192	
squared_error	best	log2	0.48770823074988323	
squared_error	random	log2	-0.6069727140042607	
squared_error	best	None	0.9096631804674157	
squared_error	random	None	0.9260673901679658	
friedman_mse	best	sqrt	0.21806238610500317	
friedman_mse	random	sqrt	-0.28677522061892446	
friedman_mse	best	log2	0.40430710669245573	
friedman_mse	random	log2	0.8194762332077207	
friedman_mse	best	None	0.9027889014854946	
friedman_mse	random	None	0.9263430158964286	
absolute_error	best	sqrt	0.6205191317465054	
absolute_error	random	sqrt	0.5375350147916804	
absolute_error	best	log2	0.17262682848029798	
absolute_error	random	log2	-0.46421366331351166	
absolute_error	best	None	0.9475699408640987	
absolute_error	random	None	0.5913039251929375	
poisson	best	sqrt	0.7871018811894861	
poisson	random	sqrt	0.6039359290883521	
poisson	best	log2	-0.3736840704740443	
poisson	random	log2	0.8128241544388679	
poisson	best	None	0.9282311919924862	
poisson	random	None	0.9026605604577832	

Random Forest Regression : High Accuracy R2 value is → 0.9527683221853296

n_estimators	criterion	max_features	R_VALUE
50	squared_error	sqrt	0.797635659401233
100	squared_error	sqrt	0.820108767147803
50	squared_error	log2	0.8134676866729936
100	squared_error	log2	0.7704575453235583
50	squared_error	none	0.9267362435313062
100	squared_error	none	0.944620736735482
50	friedman_mse	sqrt	0.7933793215244483
100	friedman_mse	sqrt	0.8244123811727204
50	friedman_mse	log2	0.8242258937314686
100	friedman_mse	log2	0.8131293240453884
50	friedman_mse	none	0.9434372769672489
100	friedman_mse	none	0.9389280486167914
50	absolute_error	sqrt	0.7853291732006605
100	absolute_error	sqrt	0.7937192045548924
50	absolute_error	log2	0.8589846737330475
100	absolute_error	log2	0.7767996360279845
50	absolute_error	none	0.9527683221853296
100	absolute_error	none	0.9451887875661286
50	poisson	sqrt	0.7034883648514918
100	poisson	sqrt	0.7738921315991466
50	poisson	log2	0.7621672328423812
100	poisson	log2	0.8183535967806734
50	poisson	none	0.9424515848682149
100	poisson	none	0.9366747022968344