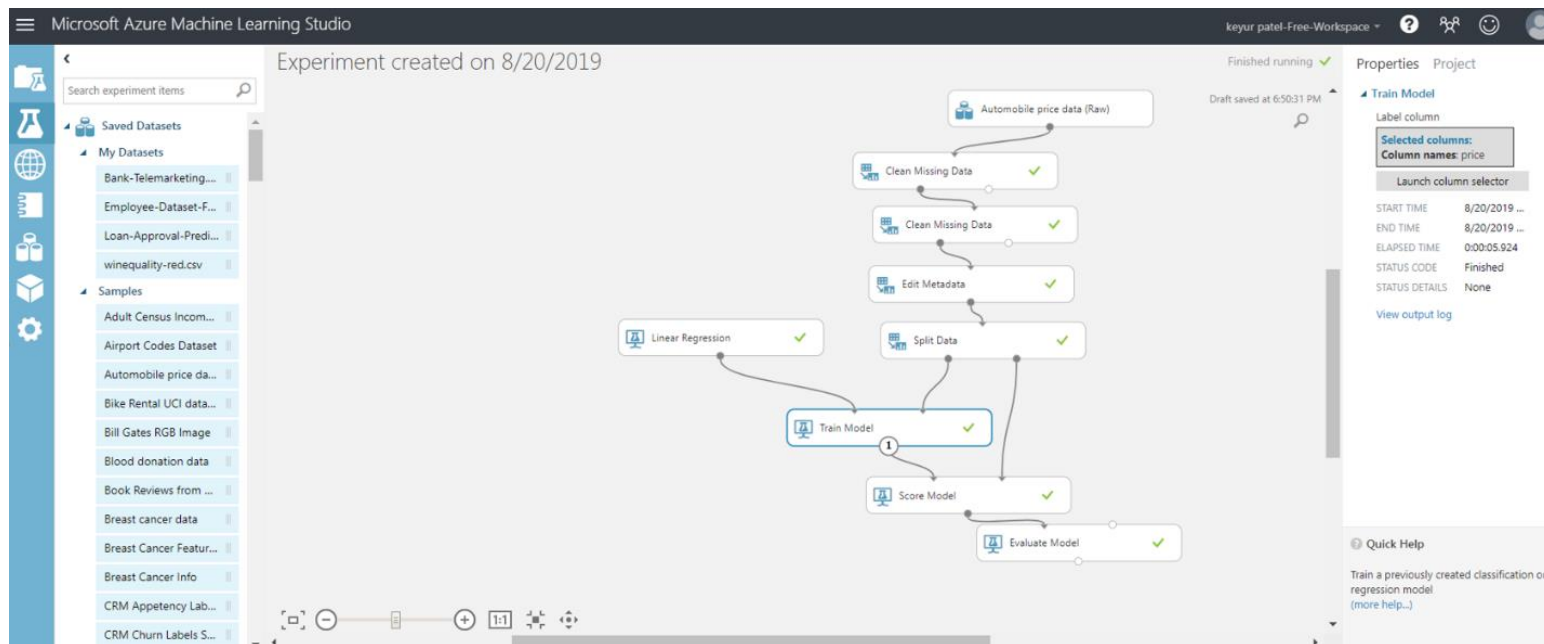


Predict price of automobile based on historic data

Algorithm used : Multiple Linear Regression

Method : Ordinary Least square



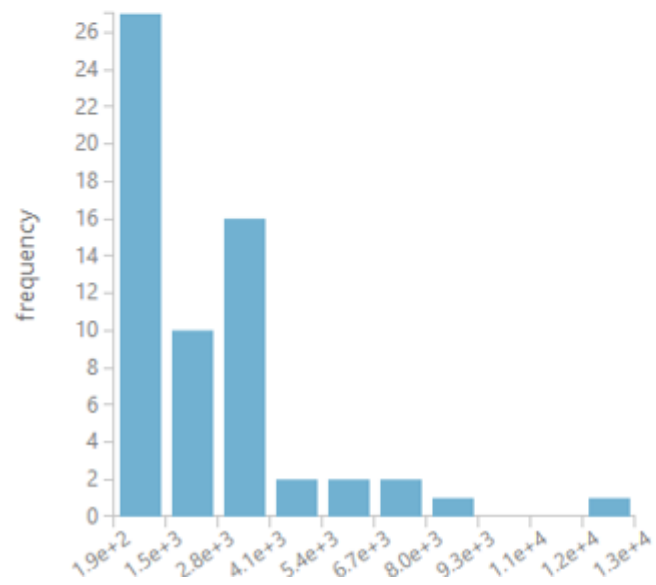
Evaluation of Linear regression model (OLS) with coefficient of regression metric

Experiment created on 8/20/2019 > Evaluate Model > Evaluation results

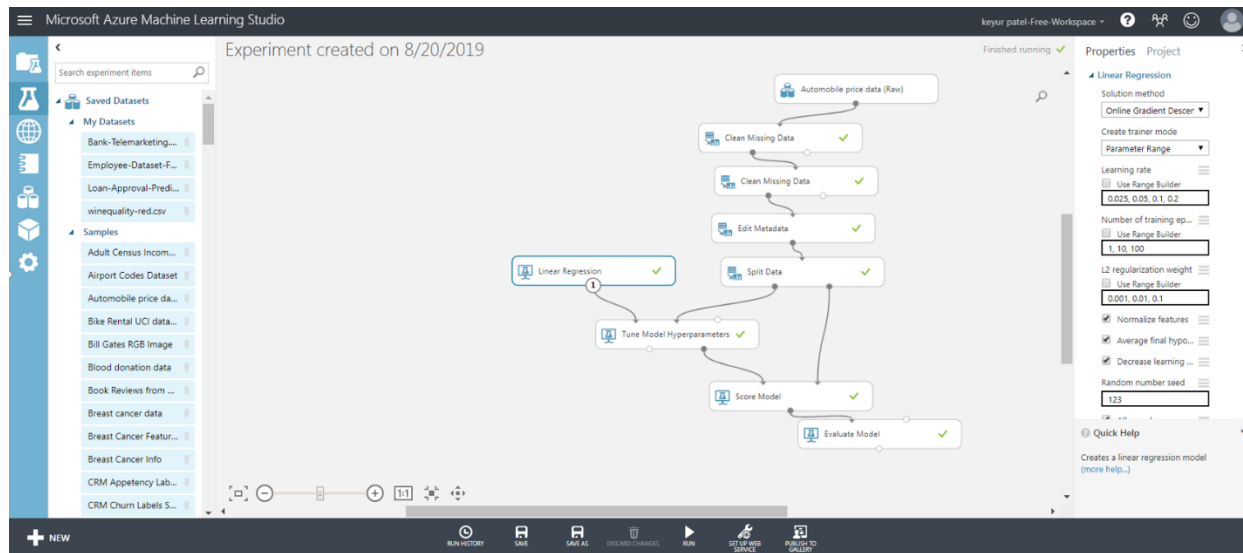
Metrics

Mean Absolute Error	2542.775676
Root Mean Squared Error	3505.155463
Relative Absolute Error	0.356019
Relative Squared Error	0.143567
Coefficient of Determination	0.856433

Error Histogram



SOLUTION METHOD: Gradient Descent



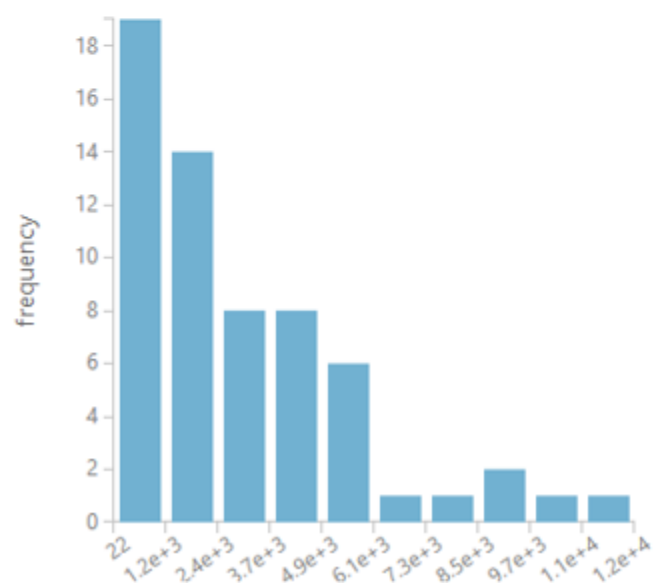
Evaluation of Linear regression model (Gradient Descent) with coefficient of regression metric

Experiment created on 8/20/2019 > Evaluate Model > Evaluation results

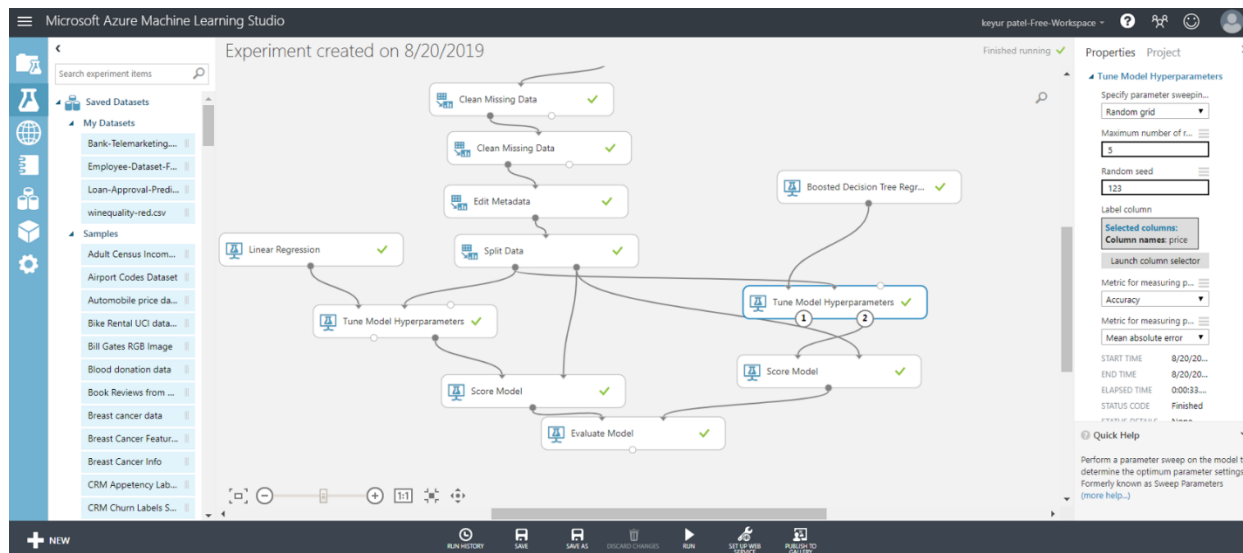
Metrics

Mean Absolute Error	2950.223905
Root Mean Squared Error	3947.362644
Relative Absolute Error	0.413067
Relative Squared Error	0.182077
Coefficient of Determination	0.817923

Error Histogram



BOOSTED DECISION TREE REGRESSION



Experiment created on 8/20/2019 > Score Model > Scored dataset

rows 61 columns 27

curb-weight	engine-type	num-of-cylinders	engine-size	fuel-system	bore	stroke	compression-ratio	horsepower	peak-rpm	city-mpg	highway-mpg	price	Scored Labels
3296	ohcv	six	181	mpfi	3.43	3.27	9	152	5200	17	22	14399	18950.962891
2191	ohc	four	98	mpfi	3.03	3.39	7.6	102	5500	24	30	8558	8890.486328
2326	ohc	four	122	mpfi	3.31	3.54	8.7	92	4200	29	34	8948	10885.193359
2414	ohc	four	122	mpfi	3.31	3.54	8.7	92	4200	27	32	10898	11544.040039
3139	ohcv	six	181	mpfi	3.43	3.27	7.8	200	5200	17	23	19699	17400.466797
2975	ohc	four	146	mpfi	3.62	3.5	9.3	116	4800	24	30	17669	13700.255859
2204	ohc	four	98	2bbl	3.19	3.03	9	70	4800	29	34	8238	7523.533691
2380	rotor	two	70	4bbl	3.329751	3.255423	9.4	101	6000	17	23	10945	12196.28418
2145	ohcf	four	108	2bbl	3.62	2.64	9.5	82	4800	32	37	7126	8371.359375
1918	ohc	four	92	2bbl	2.97	3.23	9.4	68	5500	37	41	5389	6833.986328
3495	ohc	five	183	idi	3.58	3.64	21.5	123	4350	22	25	28176	30458.648438
2714	ohc	four	146	mpfi	3.62	3.5	9.3	116	4800	24	30	11549	12245.202148
2094	ohc	four	98	2bbl	3.19	3.03	9	70	4800	38	47	7738	7760.746094

Statistics

Visualizations

To view, select a column in the table.

Evaluation of Boosted Decision tree with coefficient of regression metric

Experiment created on 8/20/2019 > Evaluate Model > Evaluation results

Metrics

Mean Absolute Error	2950.223905
Root Mean Squared Error	3947.362644
Relative Absolute Error	0.413067
Relative Squared Error	0.182077
Coefficient of Determination	0.817923

Metrics

Mean Absolute Error	2090.726554
Root Mean Squared Error	2889.81519
Relative Absolute Error	0.292727
Relative Squared Error	0.097585
Coefficient of Determination	0.902415

The performance of Boosted decision tree method is better than linear regression.

The r-squared score (coefficient of determination) of 0.90 is obtained with Boosted decision tree method.