Vancouver Real Estate Estimator Jesse Lu Lighthouse Labs, Vancouver



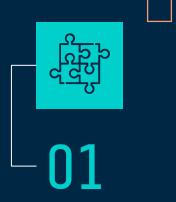






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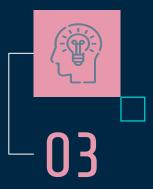
Business Case

Price estimator for Vancouver Property



Data & Model

Preprocessing, feature engineering and model fine-tuning



App Demo

Model performance and custom prediction

Bridgestone Realty

Create an application that is

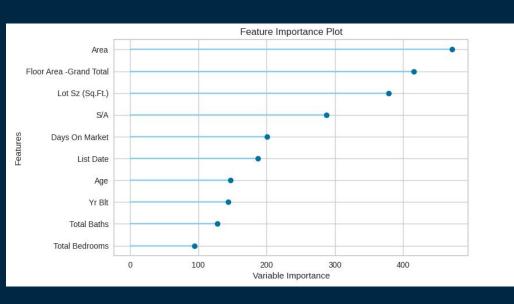
- Specific for Vancouver
- Provably unbiased
- Attract new clients
- Easy to use
- Accurate

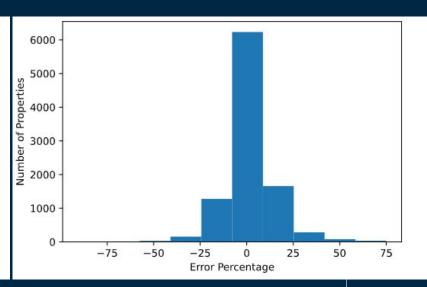






	Model	MAE	MSE	RMSE	R2	RMSLE	MAPE	TT (Sec)
et	Extra Trees Regressor	1.460575e+05	2.144463e+11	4.599778e+05	8.488000e-01	0.1417	9.340000e-02	83.267
lightgbm	Light Gradient Boosting Machine	1.709687e+05	2.232261e+11	4.698291e+05	8.435000e-01	0.1701	1.234000e-01	0.814
rf	Random Forest Regressor	1.545276e+05	2.270560e+11	4.740929e+05	8.398000e-01	0.1519	1.014000e-01	76.464
gbr	Gradient Boosting Regressor	2.130243e+05	2.862381e+11	5.328098e+05	7.986000e-01	0.2080	1.616000e-01	16.086
ridge	Ridge Regression	3.121667e+05	4.622563e+11	6.733611e+05	6.793000e-01	0.4725	2.743000e-01	0.130
llar	Lasso Least Angle Regression	3.117464e+05	4.622781e+11	6.733729e+05	6.793000e-01	0.4744	2.737000e-01	0.191
br	Bayesian Ridge	3.122565e+05	4.622411e+11	6.733406e+05	6.793000e-01	0.4740	2.744000e-01	1.584
dt	Decision Tree Regressor	2.191102e+05	4.579643e+11	6.690152e+05	6.793000e-01	0.2096	1.397000e-01	1.209
lasso	Lasso Regression	3.121386e+05	4.622740e+11	6.733771e+05	6.792000e-01	0.4725	2.742000e-01	7.029
1r	Linear Regression	3.212054e+05	4.695755e+11	6.789540e+05	6.739000e-01	0.5053	2.880000e-01	0.421
omp	Orthogonal Matching Pursuit	3.435785e+05	5.055849e+11	7.049913e+05	6.485000e-01	0.5231	3.055000e-01	0.144
en	Elastic Net	3.826943e+05	6.302987e+11	7.887155e+05	5.603000e-01	0.3958	3.173000e-01	7.649
knn	K Neighbors Regressor	3.894867e+05	7.309128e+11	8.522616e+05	4.854000e-01	0.3624	2.937000e-01	6.744
huber	Huber Regressor	3.921412e+05	8.327179e+11	9.082787e+05	4.173000e-01	0.3665	2.778000e-01	4.779
par	Passive Aggressive Regressor	6.953747e+05	1.083851e+12	1.027250e+06	2.472000e-01	0.5919	7.473000e-01	0.873
ada	AdaBoost Regressor	1.544714e+06	2.985813e+12	1.695765e+06	-1.067900e+00	1.0467	1.866500e+00	21.759
lar	Least Angle Regression	4.573550e+26	8.604667e+55	2.940537e+27	-5.635643e+43	31.0378	5.067708e+20	0.208





MAE: 51686 CAD

The average property value in the Greater Vancouver
Area is 1.21 million CAD in 2021

This translates to an Median Error of 4.25%



The Median Error for Zestimate is 6.9%

THANK YOU