Prediction of real estate property prices in Montreal



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Prediction Question

Predict the selling price of properties

Motivations: Suggest appropriate

- 1. Selling prices for the sellers
- 2. Buying prices for the buyers

Data sets

- 1. Property listings in Montreal from real estate website
 - The <u>targets</u>: Prices
 - The <u>features</u>: Location, Size, Property type, etc.
- 2. Bounding polygons from Montreal Open Data
- 3. Additional demographics from Statistics Canada
 - The <u>features</u>: Income, Population age, Crime rate, etc.





Machine learning methods

Regression of the prices
Linear and logistic regressions
Random forest
k-Nearest Neighbours
Neural Networks (Quinlan 93)

Preliminary Results

1. Regression analysis of the prices
Location accounts for variance in price

Preliminary Results

Goal: RMSE within 0.97. (Note on average final deal is 97% of selling price)

Future directions

Incorporate data from Statistics Canada based on the defined Montreal boroughs