House Price Prediction in Atlanta

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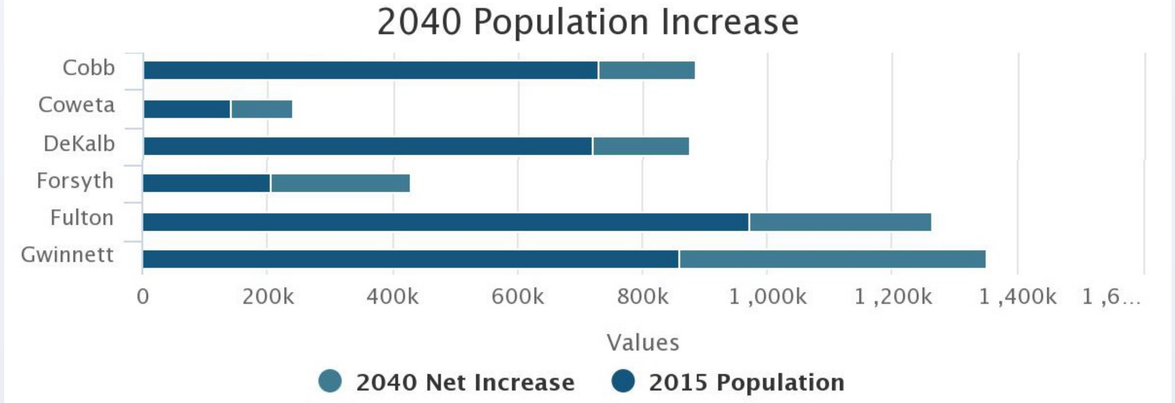
Introductions

People are moving to Atlanta!

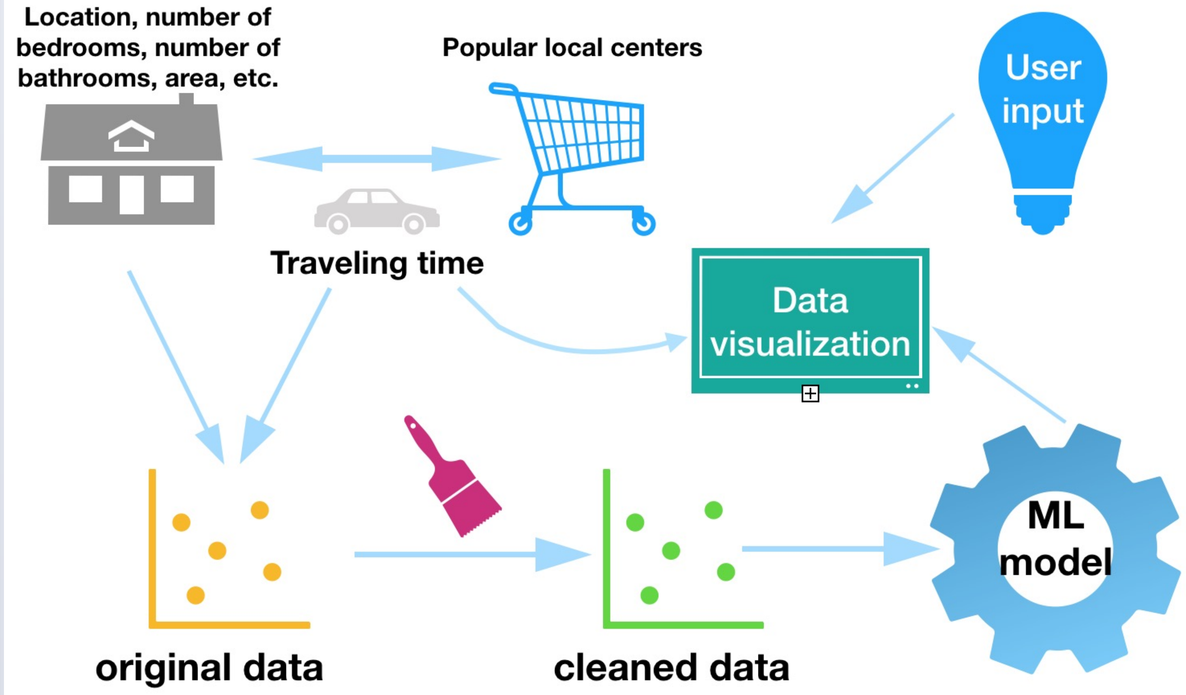


They need home in Hotlanta!

Objective:

Machine learning-based interactive price estimation and visualization tool

Methodology



Random forest, neural network, SVC, ridge regression and linear regression are tested

$$Score(y_i, y_{predict}) = 1 - \frac{1}{n}\sum_{i=1}^{n} \left| \frac{y_i - y_{predict}}{y_i} \right|$$

Random forest has the best score of 0.8

Front end uses HTML, CSS, js, d3 and employs Google Map API

Back end uses Flask to coordinate frond end and back end

Data

We use data from Zillow of houses that are either on sell or sold within three months in Atlanta

Data is cleaned through OpenRefine

Post-processing program estimate distance from house to selected local centers

Interactive Data Visualization