

# Prediction of Under Valued Properties in Singapore

## **BUSINESS PROBLEM / IDEA**

An investment firm is exploring options to invest within Singapore due to its central location in Asia. Singapore is one of the largest metropolises in the world where over 5,638,700 (2018 estimate as per Wikipedia) people live and second dense country in the world with 7,804/km<sup>2</sup> (20,212.3/sq mi) population density. Investor did not apply any area restriction so the analysis will be applied on all 28 districts of Singapore for predicting most attractive investment options. The overall purpose is to predict underpriced properties based on multiple parameters and avoid over-priced venues.

The property prices based on three major factors will be considered:

- 1) Type property tenure
- 2) Distance from city central area, and
- 3) Proximity with major shopping/restaurant areas.

Following step-by-step approach will be applied to achieve desired results:

- Gather above mentioned three factor and current housing prices
- Derive housing prices formulae based on these three factors
- Shortlist top twenty undervalued locations (outliers) for further investigation and top twenty overvalued ones for rejection.

## **DATA**

Based on business problems, following data sources will be used to achieve desired outcomes:

- Recent property price in various neighbors using webscraping from websites  
<https://www.squarefoot.com.sg/latest-transactions/sale/residential/condominium>
- Estates' locations and driving distances from city central area using GoogleMap API
- Proximity with major shopping areas using FourSquare API

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