Example

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#

Hands-on Example with MGWR

Notebook Outline:

An example of hedonic house price modeling using MGWR - Section 1 - Section 2 - Section 3 Back to the main page

1 Introduction to the Dataset

Please use this link to directly download a csv of the dataset

• houses - number of houses in the census tracts

Dependent variables

• **avg_price** - average house prices in the census tracts

OR

• In_avg_price - log-transformed average house prices in the census tracts

Independent variables

- avg_tech average technology related jobs in the census tracts
- avg_unemp average unemployment rate in the census tracts
- avg_index average number of house with a view to the waterfront
- **avg_basement** average basements in the houses in the census tracts
- avg_water_dist average distance to nearest waterfronts from the houses in the census tracts
- avg_sqft average square footage of living area in houses in the census tracts
- **avg_age** average age of housing units in the census tracts

Dependent variable distribution

Hence, we use the log-transformed dependent variable *ln_avg_price*

2 Loading the Dataset

Open the MGWR GUI software on your desktop to follow along!

At this stage I am going to do the steps elaborated below live. The screenshots of the steps below will guide you if you need additional reference.

- 2.0.1 1. Loading the dataset and variables
- 2.0.2 2. Load the dependent and independent variables
- 3 Spatial Weighting Kernels and other Options
- 3.0.1 Advanced options