

작은 도시에 에어비앤비 가격지도:  
지리가중접근법 활용한 마카오 관광지에 대한 분석  
Mapping Airbnb prices in a small city:  
A geographically weighted approach for Macau tourist attractions

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### 요약

The objectives of this research are to test the utility of semiparametric geographically weighted regression (SGWR, a spatial analysis method) in the small-scale urban sample, and to understand the geographic patterns of provision and pricing of sharing economy based accommodations in the tourist city. This paper focused on how network distance to heritage site, to casino, residential unit prices and other five attribute categories determine Airbnb price in Macau SAR, China. Findings show that SGWR models outperformed OLS models. Moreover, comparing with heritage sites, casinos are the stronger factors to drive up Airbnb (including hostels) rooms' provision and their prices; and residential unit prices are not related with the Airbnb price in the attraction clusters in Macau. This research showed a little example for the applications of SGWR in the small city, and for the analysis of online marketplace data as new urban study material. Practically, this study provides some scientific evidence for hosts, guests, urban planners, and policymakers' decision making in Macau.

## I. 서론 – Mapping Airbnb price in a small city

### 1. A geographically weighted approach for Macau tourist attractions

Price studies helps us to illustrate not only the consumers' willingness to pay in pure competitions market but their perceived economic value of products or services.

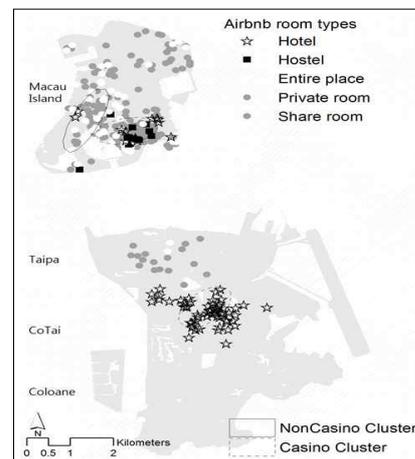
Since it is necessary to explore a suitable spatial analysis methodology for small cities, this research applied semiparametric geographically weighted regressions to analyze Airbnb accommodation price in a small tourist city.

#### 1.1 논문 인용

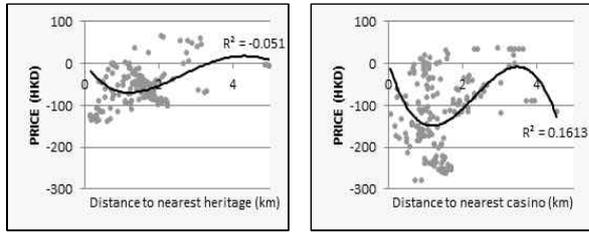
- Sharing economy based accommodations and urban environments
- Hedonic pricing and accommodations  
Location attributes, Property attributes, Online reviews, Amenities, services, and rules, Host attributes, Market conditions.

- Hedonic pricing and regression analysis  
Geographically weighted regression analysis for small cities
- Macau tourism and urban environment Airbnb in Macau

### 2. 그림과 표



▶▶ 그림 1. Map 1. Study area and population, 378 Airbnb listings in Macau



▶▶ 그림 2, 3. Coefficient of DIS\_Heritage and DIS\_Casino impact on PRICE in MGWS models

표 1. Four model summaries

	Heri_OLS	H_SGWR	Casi_OLS	C_SGWR
AICc	2502	2452	2501	2413
R <sup>2</sup>	0.607	0.773	0.610	0.868
Adj.R <sup>2</sup>	0.565	0.717	0.569	0.812
F-value	14.539***	6.104***	14.724***	6.997***

### ■ 참고 문헌 ■

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