

Seoul Bike Sharing Demand Project

Currently Rental bikes are introduced in many urban cities for the enhancement of mobility comfort. It is important to make the rental bike available and accessible to the public at the right time as it lessens the waiting time. Eventually, providing the city with a stable supply of rental bikes becomes a major concern. The crucial part is the prediction of bike count required at each hour for the stable supply of rental bikes.

The dataset SeoulBikeData.csv contains count of public bikes rented at each hour in Seoul Bike haring System with the corresponding Weather data and Holidays information. The variables contain weather information (Temperature, Humidity, Windspeed, Visibility, Dewpoint, Solar radiation, Snowfall, Rainfall), the number of bikes rented per hour, and date information.

Variable Name	Description / Unit
Date	Year-month-day
Rented Bike count	Count of bikes rented at each hour
Hour	Hour of the day
Temperature	Temperature (°C)
Humidity	Relative humidity (%)
Windspeed	Wind speed (m/s)
Visibility	Visibility (10 m units)
Dew point temperature	Dew point temperature (°C)
Solar radiation	Solar radiation (MJ/m ²)
Rainfall	Rainfall (mm)
Snowfall	Snowfall (cm)
Seasons	Winter, Spring, Summer, Autumn
Holiday	Holiday / No holiday
Functional Day	NoFunc (Non-functional hours), Fun (Functional hours)

Data Source:

- <http://data.seoul.go.kr/> SOUTH KOREA PUBLIC HOLIDAYS. URL: publicholidays.go.kr