Center for Machine Learning and Intelligent Systems

Seoul Bike Sharing Demand Data Set

Download: Data Folder, Data Set Description

Abstract: The dataset contains count of public bikes rented at each hour in Seoul Bike haring System with the corresponding Weather data and Holidays information

Data Set Characteristics:	Multivariate	**Number of Instances:**	8760	**Area:**	Computer
Attribute Characteristics:	Integer, Real	**Number of Attributes:**	14	**Date Donated**	2020-03-01
Associated Tasks:	Regression	**Missing Values?**	N/A	**Number of Web Hits:**	48941

Source:

Data Source :http://data.seoul.go.kr/
SOUTH KOREA PUBLIC HOLIDAYS. URL: publicholidays.go.kr

Data Set Information:

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 contains weather information (Temperature, Humidity, Windspeed, Visibility, Dewpoint, Solar radiation, Snowfall, Rainfall), the number of bikes rented per hour and date information.

Attribute Information:

Date : year-month-day
Rented Bike count - Count of bikes rented at each hour
Hour - Hour of he day
Temperature-Temperature in Celsius
Humidity - %
Windspeed - m/s
Visibility - 10m
Dew point temperature - Celsius
Solar radiation - MJ/m2
Rainfall - mm
Snowfall - cm
Seasons - Winter, Spring, Summer, Autumn
Holiday - Holiday/No holiday
Functional Day - NoFunc(Non Functional Hours), Fun(Functional hours)

Relevant Papers:

[1] Sathishkumar V E, Jangwoo Park, and Yongyun Cho. 'Using data mining techniques for bike sharing demand prediction in metropolitan city.' Computer Communications, Vol.153, pp.353-366, March, 2020
[2] Sathishkumar V E and Yongyun Cho. 'A rule-based model for Seoul Bike sharing demand prediction using weather data' European Journal of Remote Sensing, pp. 1-18, Feb, 2020

Citation Request:

[1] Sathishkumar V E, Jangwoo Park, and Yongyun Cho. 'Using data mining techniques for bike sharing demand prediction in metropolitan city.' Computer Communications, Vol.153, pp.353-366, March, 2020
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