Seoul Bike Sharing Demand Data Set

Abstract:

|  |
| --- |
| The dataset contains count of public bikes rented at each hour in Seoul Bike sharing System with the corresponding Weather data and Holidays 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.  Objective:  We are interested in finding out how the general public of Seoul are renting out bikes in terms of Seasons, Holidays, Weather conditions and at what times of the day. From a thorough understanding of this data, we would like to predict the rate at which bikes will be rented out in the future.  Dataset Information:  The Dataset has 8760 Instances with 14 attributes which are numerical and categorical in nature.  Date: year-month-day Rented Bike count - Number of bikes rented at each hour Hour - Hour of the 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)  We will be creating new categorical variables to better analyze the data, such as,  Day of the Week – Sun to Sat  Part of the day – Morning, Afternoon, Evening, Night |