**Electricity Consumption Dataset:**

Electricity Consumption for Electrolysis.

**Content**

Company of Electrolysia supplies electricity to the city. It is looking to optimise its electricity production based on the historical electricity consumption of the people of Electrovania.

The company has hired you as a Data Scientist to investigate the past consumption and the weather information to come up with a model that catches the trend as accurately as possible. You have to bear in mind that there are many factors that affect electricity consumption and not all can be measured. Electrolysia has provided you this data on hourly data spanning five years.

For this Assignment, the training set consists of the first 23 days of each month and the test set is the 24th to the end of the month, where the public leader board is based on the first two days of test, whereas the private leader board considers the rest of the days. Your task is to predict the electricity consumption on an hourly basis.

Note that you cannot use future information to model past consumption. For example, you cannot use February 2017 data to predict last week of January 2017 information. **Inspiration**

Identify fraudulent credit card transactions.

**Content**

It represents a fictitious time period wherein we are to predict future electricity consumption.

**Steps to Perform the Model:**

1.Load the dataset

2.Preprocessing.

a) Print the first 5 rows of the dataset

b) Check the features in the dataset

c)Check the missing values

d)Check the numerical features in the dataset

e) Check the distribution of categorical columns

3.Separate features and Labels

4.Split the dataset to train and test

5.Do normalisation if required

6.Model Building (ANN)

7.Compile the model

8.Make predictions

9.Find MSE, MAE, RMSE, R2 Score

10. Build the ANN models with increasing 2 dense layers to each model and compare the accuracy scores (Minimum 5 models Required)

11. Visualize train and validation Accuracy and Losses for every model.

**Note:** For any doubt’s clarifications, Join the mentor session from 2:00 pm to 6:00 pm or reach us on Discord 10:00 AM to 5:00 PM.

**Thanks, and Regards,**

Technology For All