

CS3390/CS5590/AI5000 Foundations of Machine Learning

Assignment 1 | Q1

ReadMe

Overview:

Meal Time Prediction using Linear and Poisson Regression - This code demonstrates the use of Linear and Poisson Regression for predicting meal times based on various factors such as day of the week, holiday status, category of the meal, and time of the day.

Prerequisites:

- Python needs to be installed on the system.
- Before running the code, make sure you have the following Python libraries installed:
 - csv
 - pandas
 - statistics
 - numpy
 - matplotlib
 - sklearn
 - math

You can install these libraries using pip (**Sample command:** `pip install pandas matplotlib scikit-learn`)

How to run the code:

- Download the zip file and store it in the required directory.
- Extract the zip file and store the files in the same directory.
- **Option 1:**
 - Launch Jupyter Notebook if available on the system, and open the file “FoML_Assignment1.ipynb” in the stored directory.
 - Before running the code, open the notebook editor and change the line `“test_data = pd.read_csv('/test_data_new.csv')”` to `“test_data = pd.read_csv('<directory_path/test_data_new.csv>')”`
 - You can now run each cell in order to view the results.

- **Option 2:**

- Launch your terminal, and move to the required directory using the “cd” terminal command.
- Before running the code, open the .py file on any environment (most used is IDLE), and change the line “`test_data = pd.read_csv('/test_data_new.csv')`” to “`test_data = pd.read_csv('<directory path/test data new.csv>')`”
- Now, run the command “python foml_assignment1.py”. The code will run on its own and you will see the required outputs.