LinuxWorld Informatics Pvt. Ltd.

Ref: LWIPL-JPR-2020-1569   **Date**: 20th Aug, 2020

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the project work and report entitled **"Indian Rainfall Prediction"** embodies the original work of **Mr. Rajdeep Das** from **Heritage Institute of Technology-Kolkata** (Master of Computer Application) at **LinuxWorld Informatics Pvt Ltd.**

The duration of the project undergone as mentioned above, under the mentorship of **Mr. Vimal Daga,** Technical Head was from **22nd May, 2020 to 17th August, 2020.**

Gist About the Project:

In India, Rainfall or Monsoon is one of the great important factors of nature. Generally two types of predictions can be done for analyzing.

- Type 1- Long Term Predictions
- Type 2- Short Term Predictions

In this project, it is tried to analyze the Long Term rainfall using the collected datasets of Indian Meteorological Department. The aim is to predict the rainfall tendency in different areas by using the past data of those areas.

Total two datasets have been used in this case:

1. Dataset 1: Average rainfall of 1951-2000 for each district, for every month.
2. Dataset 2: Average rainfall of 1901-2015 for each state for every year.

Technologies Used:

- **Python -** Python language is used for writing the server script, which takes the data from the given dataset then analyze the expecting output or prediction at approximate level.
- **Machine Learning –** Machine learning is used to analyze the data.

Ref: LWIPL-JPR-2020-1569   **Date**: 20thAug, 2020

Conclusion: Data observations are done into various visualization which helps in implementing the approximate outputs. In some cases, the machine learning didn't work due to the fluctuations in rainfalls in some areas.
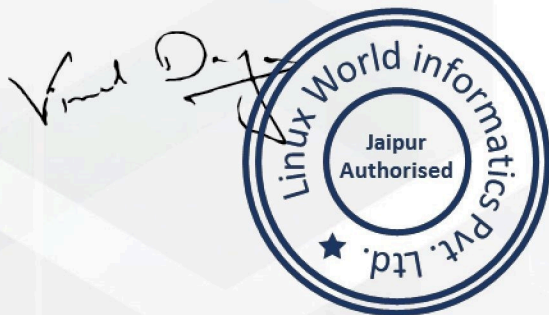
Future Scope: Helpful in Weather prediction and in understanding the rainfall sequences in different areas.

We wish him all the success for his future

Regards

LinuxWorld Informatics Pvt Ltd

Mr. Vimal Daga – Technical Head