A Project Report
on

Smart Meter Analytics

Submitted for Complete fulfillment of award of

6 WEEKS INTERNSHIP

Certificate

At

Sopra Steria
(**A Information technology consulting company, NOIDA)**

By

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Under the Guidance of
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I.T.S ENGINEERING COLLEGE
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CERTIFICATE

Certified that **Piyush, Prince, Ifteshan, Himanshu, Mohit** has carried out the Project work presented in this project entitled **"Smart Meter Analytics."** for the award of **6 weeks internship** from **Sopra Steria , Gr. NOIDA** under my supervision. The Project embodies result of original work and studies carried out by Student himself and the contents of the Project do not form the basis for the award of any other degree to the candidate or to anybody else.

Date: 17/07/2017

ABSTRACT

This project uses data from the UC Irvine Machine Learning Repository, a popular repository for machine learning datasets. In particular, we will be using the "Individual household electric power consumption Data Set" which I have made available at https://github.com/piyush-its-1/smartmeteranalytic
A **smart meter** is an electronic device that records consumption of electric energy in intervals of an hour or less and communicates that information at least daily back to the utility for monitoring and billing. **Smart meters** enable two-way communication between the **meter** and the central system.

Smart meters use a secure national communication network (called the DCC) to automatically and wirelessly send your actual energy usage to your supplier. This means households will no longer rely on estimated energy bills or have to provide their own regular readings.
Smart meters will also come with an in-home display. This display gives the household real-time usage info, including kWh use and cost.
It can helps them monitor their data-in-motion from operated assets in real-time and compare that to deep historical analysis on past trends. That data discovery powers actionable intelligence for remote operations support, and also delivers real-time insights to: increase grid reliability, balance loads, reduce outages, and detect fraud.

ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the Project undertaken during . First and foremost We wish to thank our Guide **Prof Ashish Kumar** (**Head Of Department of Computer Science and Engineering , I.T.S. Engineering College) and Our Mentor Mrs. Ritika Sharma (Sopra Steria)** for their kind blessings to us . They allowed us the freedom to explore, while at the same time provided us with invaluable sight without which this Project would not have been possible.

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LIST OF SYMBOLS, ABBREVIATIONS

S.No.	Symbol/ Abbreviations	Description
1.	SQL	Sequential Query Language
2.	RDBMS	Relational Database Management System
3.	OP	Output
4.	IP	Input