



Channabasaveshwara Institute of Technology

(ISO 9001:2015 Certified Institution)

(Affiliated to VTU, Belgaum & Approved by AICTE, New Delhi)

NH 206 (B.H. Road), Gubbi, Tumkur – 572 216. Karnataka

2022-23

Department of Computer Science and Engineering



FORMAT FOR STUDENT PROJECT SYNOPSIS

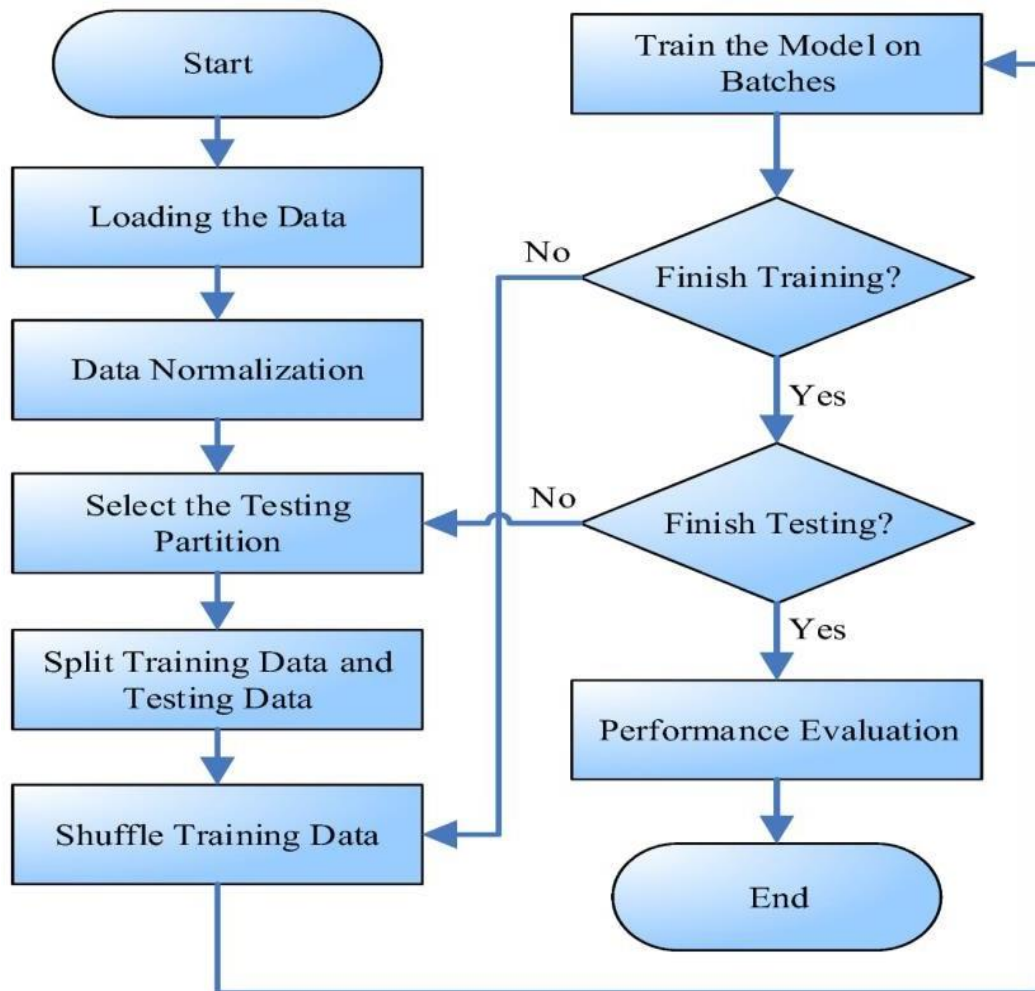
[To be submitted by each Project batch of VII Semester as part of the CIE (Continuous Internal Evaluation) of the course *Project Work Phase-I + Project work Seminar*]

1.	Project Title: ELECTRICITY PRICE FORECASTING USING DEEP LEARNING
2.	Project Domain / Category / Theme: DEEP LEARNING
3.	<p>Project Team Members:</p> <p>1 . Name: RAKSHITHA SHANKAR USN No: 1CG19CS090 Email id: 1cg19cs090@cittumkur.org Mobile No:9686125109</p> <p>2. Name: SOWMYASHREE OA USN No: 1CG19CS105 Email id: 1cg19cs105@cittumkur.org Mobile No:974158823</p> <p>3. Name: VARSHITHA T S USN No: 1CG19CS114 Email id:1cg19cs114@cittumkur.org Mobile No:7349136726</p> <p>4. Name: POOJA M USN No: 1CG19CS085 Email id: 1cg19cs085@cittumkur.org Mobile No:8861363357</p>
4.	<p>Objectives of the project:</p> <ul style="list-style-type: none">➤ This study is to evaluate the peak performance of different ML Algorithms & Deep neural networks in predicting the price of electricity.➤ To provide an optimized scheduling process for an industrial loads to get an accurate electricity price In the process of EPF.➤ Comparing ML & DL algorithms, the high accurated model for EPF is selected.

5.

Methodology:

- We use a time series dataset to predict the price of electricity. Data is initially loaded into the system, then processed using the feature extraction and feature selection procedures, which both require normalised data. dividing the data into train and test sets is the second step. The models are assessed on batches of train data. ultimate performance analysis based on RMSE and MAE.



6.

Problem statement:

- Energy is transferred between several networks, there are numerous bidding techniques, the price of electricity is non-linear and extremely variable, and both supply and demand are always changing. Storage is therefore unprofitable.

7.	<p>Application of the project:</p> <ul style="list-style-type: none"> ➤ Smart transport ➤ Commercial buildings ➤ Smart houses ➤ factories
8.	<p>Expected Outcome of the project:</p> <ul style="list-style-type: none"> ➤ The literature survey concludes with better results for electricity consumption prediction with the hybrid approach of machine learning techniques. ➤ Feature selection is essential to achieving accurate prediction, and features from integrated markets have an impact on prediction. ➤ using graph plots and error metrics and the proposed method is found to provide better accuracy.

Name and Signature of the Guide

Seal and Signature of HOD