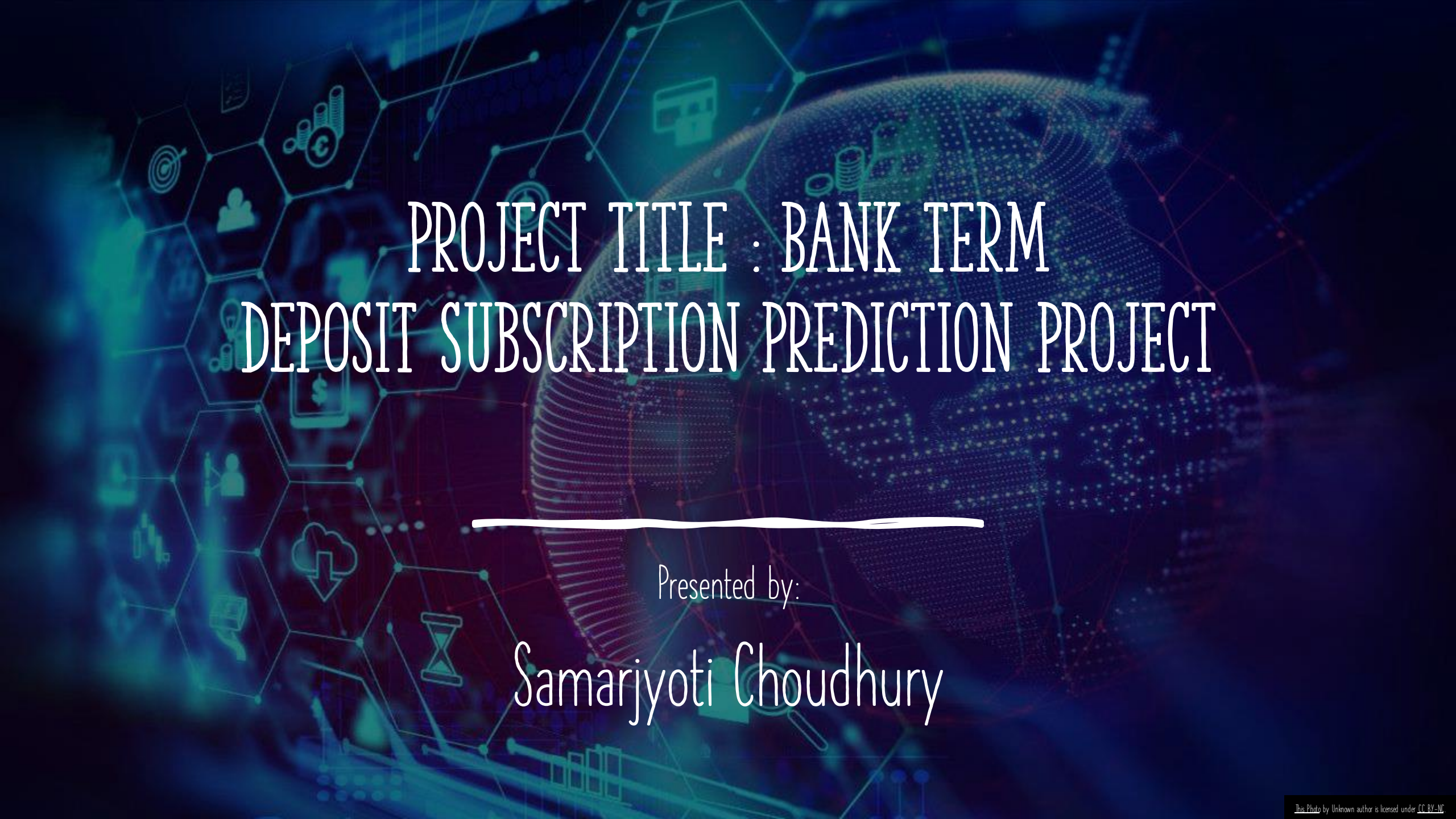


PROJECT TITLE : BANK TERM DEPOSIT SUBSCRIPTION PREDICTION PROJECT

Presented by:

Samarjyoti Choudhury

Goal of the Project

The output i.e. “Does this client subscribe to a term deposit” was a two class binary variable ‘y’ (yes/no), where ‘yes’ is client subscribed to the term deposit and ‘no’ is client did not subscribe to the term deposit.Our Goal is to determine whether the client will subscribed to "Term-Deposits".

What is term deposits?

A term deposit is a cash investment held at a financial institution. Your money is invested for an agreed rate of interest over a fixed amount of time, or term. A Term deposit is a deposit that a bank or a financial institution offers with a fixed rate (often better than just opening deposit account) in which your money will be returned back at a specific maturity time.

DATA INTRODUCTION

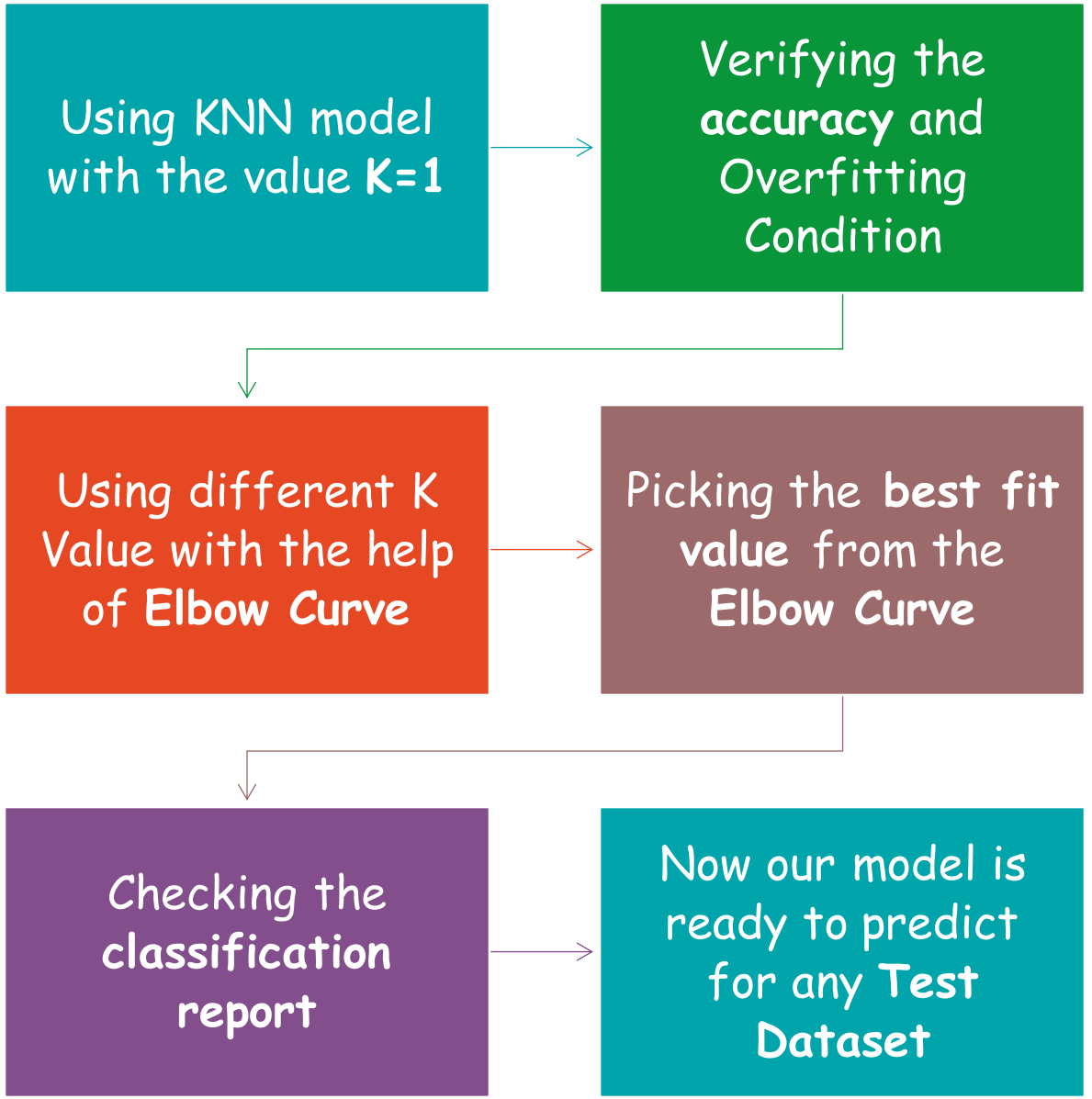
The following 17 baseline parameters comprised the input set for the model:

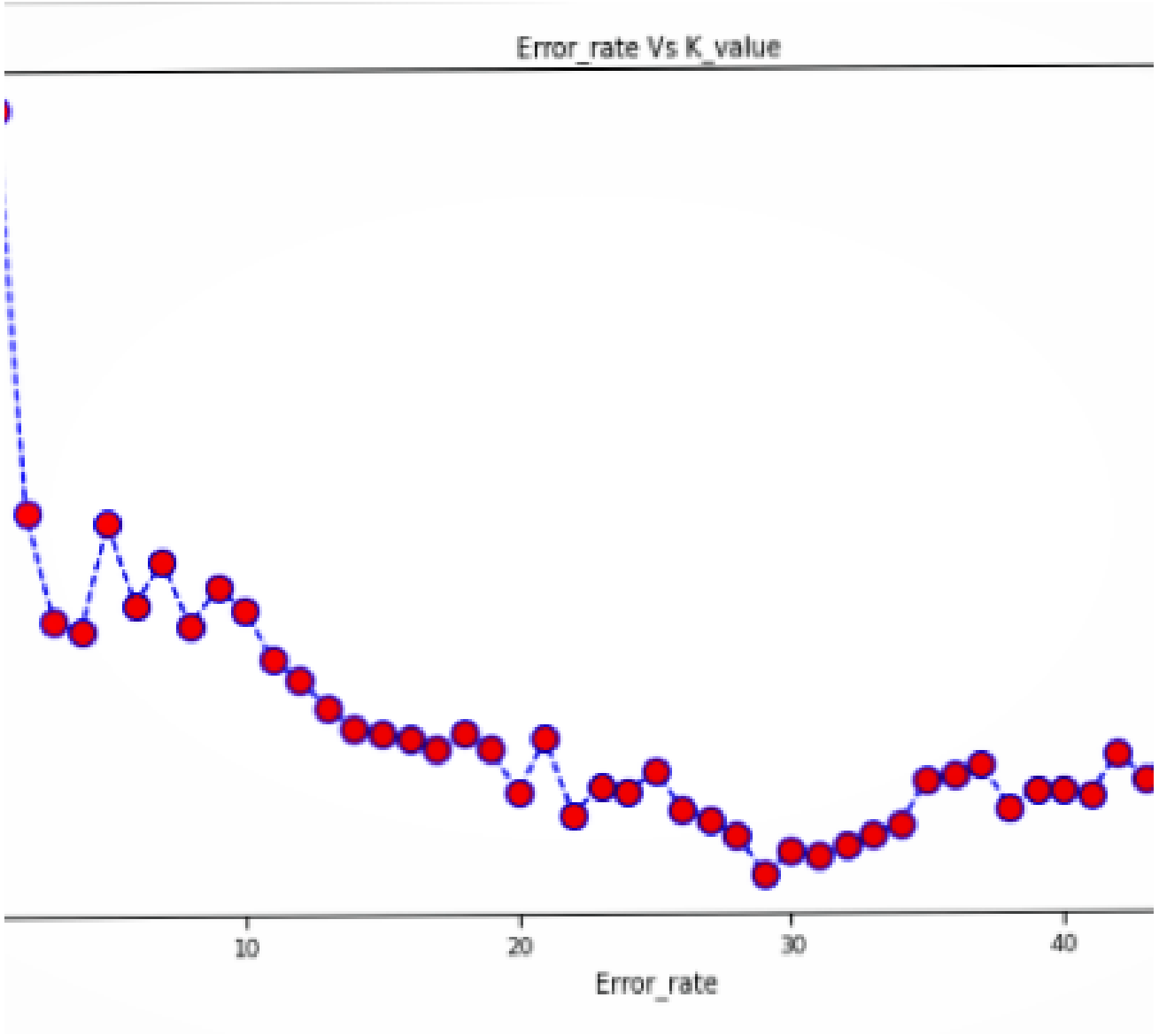
- 4 Binary: Default, housing, loan, subscribed(target)
- 6 Categorical: job, marital, education, contact, month, poutcome
- 7 continuous: age, balance, day_of_week,duration, campaign,pdays, previous

Model Building

We will go to model building with the help of different Algorithms namely **LOGISTIC REGRESSION,DECISION TREE CLASSIFICATION & K-NEAREST NEIGHBOR CLASSIFIER** and implement the best model to predict the test dataset. Finally We have Implemented Our **KNN CLASSIFIER** model to predict our Test dataset. After implementing the model, also we have checked our Accuracy with the help of **Solution_checker.xlsx** file. After printing the predictions, the accuracy is auto-generated & it is found that the model accuracy is close to **91%.** Hence We are going with this model to implement for Prediction of the classification project.

Steps of Model Implementation





Elbow Curve

From the elbow curve we see that the **Error_rate** is continiously decreasing from the value **K=22**.

We will use K=22 because it is the best suited Value from the Elbow Curve from the model. So, We will go with K=22 and check the Classification Report

CONCLUSION

- We will use K=22 because it is the best suited Value from the Elbow Curve from the model. So, We will go with K=22 and check the accuracy from the **Classification report**.
- On the next text we will apply the model for the test dataset and Converting the Prediction array into a **CSV File** and finding the accuracy of the model with the help of **Solution_Checker.xlsx**

For any Queries, Please visit ::

[Github_Link of the Project]

THANK YOU!!