* Using K fold Cross validation to measure accuracy of our Linear Regression model.

We are getting 5 iterations Score above 80%.

We are trying to test few other algorithms for regression to see if we are getting better results.

Trying Grid Search CV

Tuple, Rows, Records

Field, Columns

13000 Rows in the DataSet

CLIENT

→ UI User Interface
Website Building using HTML, CSS, JS

MODEL

→ Contains the 1. Jupyter Source File
   2. Columns. json
   3. Bangalore home prices model. pickle file

SERVER

Contains artifacts
   Server.py
   util.py

UI Building

- HTML - Hyper Text Markup Language
         - Skeleton, Structure of the WebPage
- CSS - Cascading Style Sheet
         - Styling of the Page
         Colour, look & feel
- JS will store the Dynamic Code
         Backend to retrieve the data

Lasso
Decision Tree
Regression

Project Options

① multiple Disease Prediction
   1) Diabetes
   2) Heart Disease Prediction
   3) Parkinson Disease

② Potato Disease Classification — ⊗

③ Celebrity Face Recognition — ⊗ — Opencv Image Classification

④ Sonar Rock or mine Prediction

Regression ML
   ① House Price
   ② Car Price
   ③ Gold Price Prediction
   ④ medical Insurance Cost Prediction
   ⑤ Calories Burnt Prediction

Classification ML
   ① SONAR Rock vs mine
   ② Diabetes Prediction
   ③ Loan Status Prediction

HR Data Analytics & Whatsapp Chat Analysis

• Working Preference of People

• Relating Online Social
   Behaviour with the
   HR Leave Data

Novelty: Integrating Chat Data with the
leave-taking, Working from home
patterns.

For instance, a person weak, non active on
whatsapp can be considered not well

⑤ Whatsapp Chat
   Analysis
   NLP

streamlit   nltk/word
matplotlib   Word cloud
Sklearn   pandas
             emoji

Tensorflow Object Detection
Python

1. Install Tensorflow Object
   Detection on a local
   machine or Colab

2. Collect and label images
   for O% Object Detection
   using labelling

3. Train Deep learning powered
   object Detection model using
   Python and TFOD

4. Detecting O% object using
   in real time using a Webcam
   and using Images

5. Tune Object Detection Models
   to improve precision and Recall

6. Export Your Model to
   Tensorflow JS for Integration
   in React JS web Pages

7. Export your model to
   TFLite for use

Direction Detection &
Sentiment Analysis

HR Analytics

P- Present
PL- Paid leave
SL- Sick leave
HPL- Half Paid leave
HSL- Half Day Sick leave
WFH- Work From Home

- Ask clients the Right Question
  Become a Strategic Partner rather than a Solution Provider
  Ask their long term plans and align your Solutions accordingly

- Understand the Working Preference of People
  → Work from Home
  → Work from Office

- Better Capacity planning, better utilization of resources
  if the Working preference pattern is known

- To know the % of Sick leave on a particular Day.
  Too many Sick leaves in a day can't be coincidence.

  Learning to Build a Dashboard in Power BI

Gathering & Transforming Data

Power Query - Helps to gather & transform Data

STEP-1   Adding Excel Files together &
         Combining the Different month Data into

Creating a
Template   a single

1) Choosing only April Data
2) Removing the Attendance Data
3) #"Removed other Columns"{0}[Data]
4) Choosing First Row as heading
5) Removing the Second Row
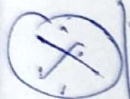6) Removing to EmpCode and Name

Transpose - Changing Rows to Column

When you are excluding/transforming data, always think of a dynamic way so that it will work even with new data.

* Creating a function so that we can replicate in all the sheets

Parameter - It is a way of filtering something lets say for Eg day and it can be dynamic way

Uncheck "the original column name as prefix" to keep column names short.

(X) Whenever Dates are in multiple columns, bring it to one single columns

TAKEAWAY
· Googling Solution Imp skill
· Think of a dynamic way always.

CREATING METRICS

Metrics - They are a quantitative assessment which will help us make decision

* Keeping the measures in the separate table is the best practice that will organise them all in one place.

· Working Preference
· Sick leave ./.

* Creating Measure for Total Working Days -

① Group your Measures under one place.

② Understanding Calculate function in DAX is very important

③ You can also create additional columns to your data using DAX

DASHBOARDING

· DAX is a query Expression language in Power BI

1. * Where to place your most important Insights in the Dashboard
2. * Good Insights Report should enable the Stakeholder to ask more "Why".
3. * Copy paste visuals and alter them to Boost your productivity.

Real Time Business Needs

* **Sending Alert** — Can be set up from cloud
* **Automatic Data Refresh** → Can retrieve data from google sheets
* **Setting security levels for Data** — 2 Dashboards from cloud

Whatsapp Chat Analysis

Top Statistics

Total messages   Total Words   Media Shared   Links Shared

~~Preparing~~ PRE-PROCESSING the Data

• Converting the text file data and converting it to pandas dataframe

Creating Regular Expression string & calling it

Pattern

Splitting Dates & messages