



# **IBM HACK CHALLENGE**

## **Code-Brewers**

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# Impact of Covid-19 on food security

## VISUALIZATION DASHBOARD

# PURPOSE

- The goal of this task is to build the model that will tell us the availability of food in that particular area, state and country.
- Due to the lack of information governments and citizens around the world do not know how to prepare for this epidemic and leading to stocking up of essential goods which is making shortage of items in market.
- A strong model that will tell availability of food so that citizens do not panic in this situation and not store food unnecessarily.

# SOLUTION

- The system is designed in order to represent data in visualized manner.
- Data analysis is done and then according to particular city mentioned during registration the availability of food items is shown to their respective dashboard.
- It will also help user to save food items for future use.

# Data set Description

- Source : <https://github.com/IBM/visualize-food-insecurity>
- Number of instances:3262
- Number of attributes:1244

# Software Designing

- Registration form has been created using node red in which user has to fill his basic details along with his city, state and country.
- After Registration he/she can go to dashboard by simply login with username.
- By using automatic AI experiment we found that random forest regressor is best algorithm that will suit our data.

## Form

Status **Thank You tech brewers for registering successfully.**

Enter your Name \*

tech brewers

Enter your Email Id \*

tech@gmail.com

Enter your Password \*

••••

State \*

Delhi (UT)

City \*

New Delhi

Country \*

India

Pincode \*

110098

Phone No \*

9012887910

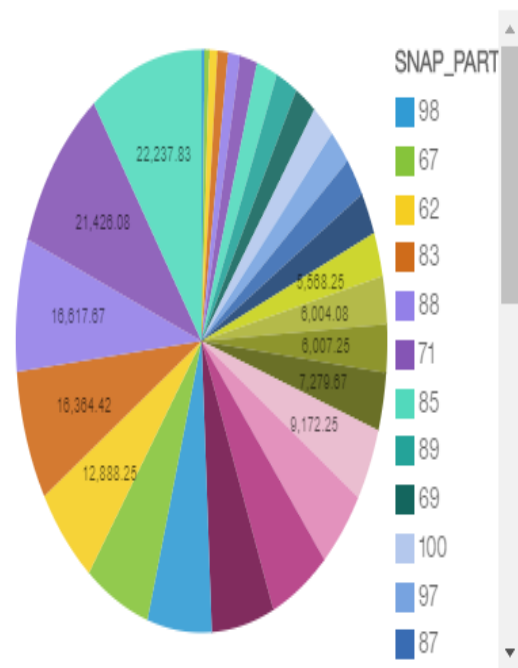
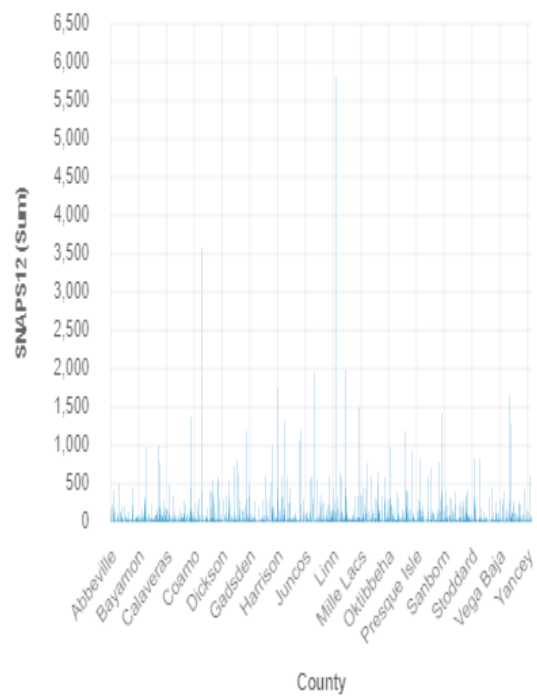
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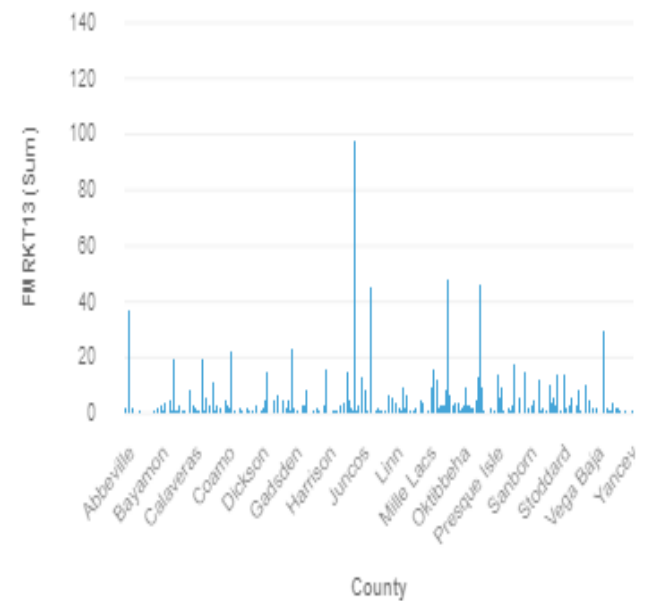
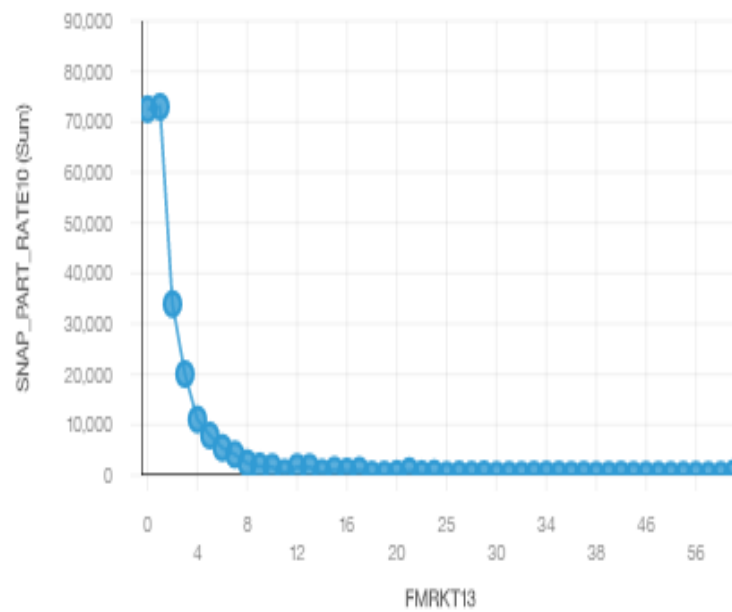
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# RANDOM FOREST REGRESSOR

- A random forest is a meta estimator that fits a number of classifying decision trees on various sub-samples of the dataset and uses averaging to improve the predictive accuracy and control over-fitting.







# RESULT

- The regressor model can be used to determine the state-wise, city-wise, country-wise availability of food so that it can be used efficiently.
- An application is designed which is used by both supplier and consumer to check the availability of food in their particular areas.

# SCOPE

- It have a wide scope in future as it can be applicable on all the daily need items and will help people to live a better lifestyle.
- Also, this system can be expanded by predicting numerous properties from the supplier's point of view.



**THANKYOU!**