Greetings!

From

Yogalakshmi Kumaravelan

I will walk you through my FRT project!

Cropify - A Crop Recommender Application

DATASET ANALYSIS USING MICROSOFT AZURE MACHINE LEARNING STUDIO

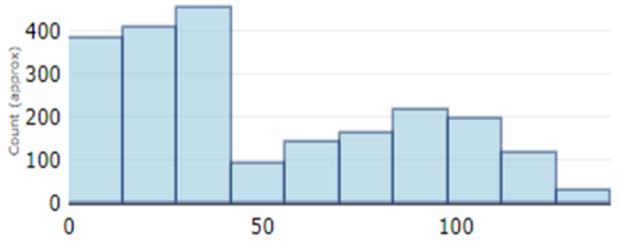
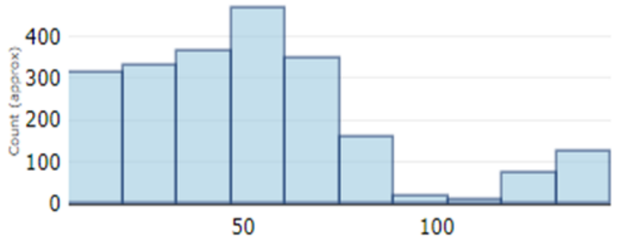
Create a new Automated ML run

- Select dataset
- Configure run
- Select task and settings
- [Optional] Validate and test

Crop_Prediction_DS

Preview | Profile

Number of columns: 8 Number of rows: 2200

Column	Profile	Type	Min	Max	Count	Missing cou
N		Integer	0	140	2200	0
P		Integer	5	145	2200	0
K		Integer	5	205	2200	0

Close

Microsoft Azure Machine Learning Studio

Azure for Students
Crop_Predictor

Home > Automated ML > Start run

Create a new Automated ML run

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Crop_Prediction_DS

Preview | Profile

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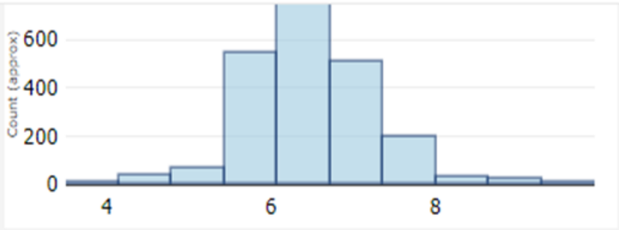
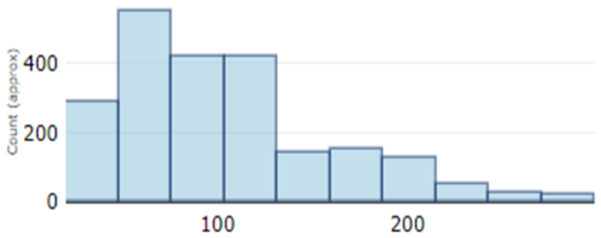
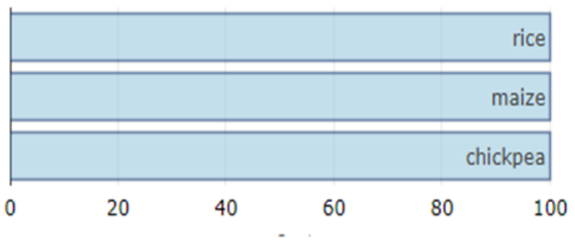
Column	Profile	Type	Min	Max	Count	Missing cou
						
rainfall		Decimal	20.21	298.56	2200	0
crop		String	apple	watermelon	2200	0

Close

This job is using the new compute runtime to improve performance. You can expect to see a different log structure along with the new runtime.

shy_brush_5xy63zc5

Refresh | Deploy | Download | Explain model | Test model (preview) | Cancel | Delete

Details | Model | Explanations (preview) | Metrics | Data transformation (preview) | Test results (preview) | Outputs + logs | Images | Child runs | Snapshot | Monitoring (preview)

Explanation ID

27d0838d

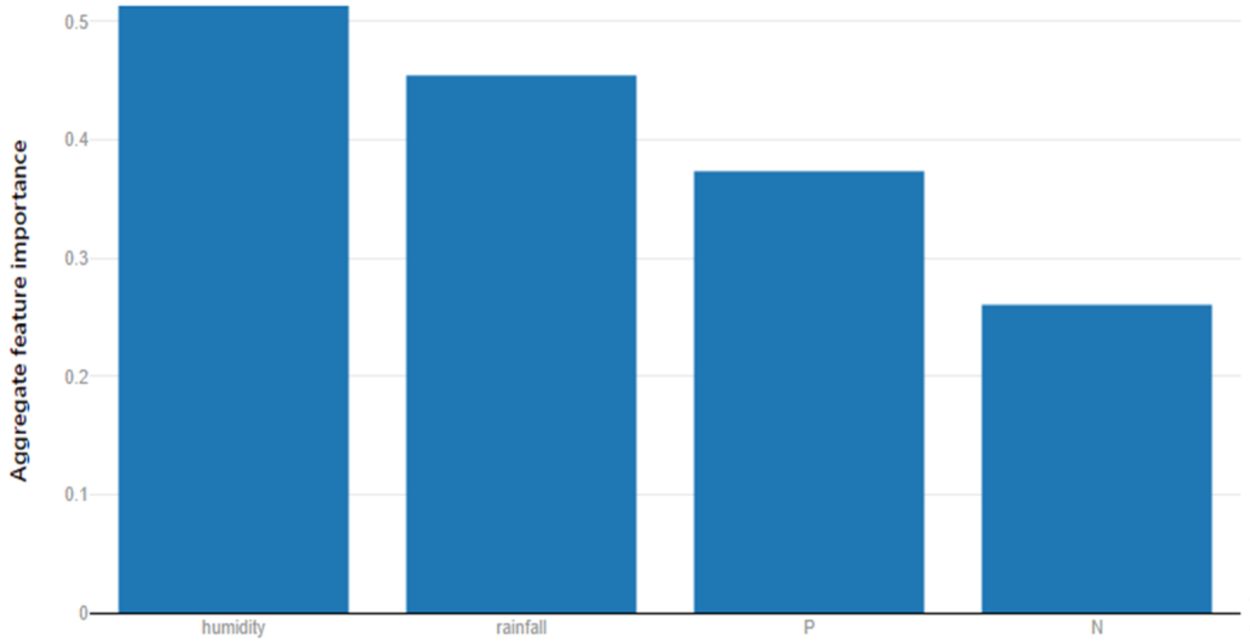
447be84d

DATA STATISTICS
Multiclass classifier
2200 datapoints
7 features

DATASET COHORTS
All data
2200 datapoints
0 filters

importances. All cohorts' feature importances are shown side by side and can be toggled off by selecting the cohort in the legend. Click on any of the features in the graph to see a density plot below of how values of the selected feature affect prediction.

Top 4 features by their importance



Dataset cohorts

Toggle cohorts on and off in the plot by clicking on the legend items.

All data

Sort by

All data

Chart type

Bar

Box

Class importance weights

Average of absolute value

MODEL CONSTRUCTION USING MICROSOFT AZURE MACHINE LEARNING STUDIO

New
Home
Author
Notebooks
Automated ML
Designer
Assets
Datasets
Experiments
Pipelines
Models
Endpoints
Manage
Compute
Environments
Datastores
Data Labeling
Linked Services

amiable_loquat_8m4xrx02

Refresh | Edit and submit | Cancel | Delete

Details | Data guardrails | Models | Outputs + logs | Child runs | Snapshot

Refresh | Deploy | Download | Explain model | Edit columns | Reset view

Search

Submitted time | All filters | Clear all

Showing 1-25 of 44 models

Page size: 25

Algorithm name	Explained	AUC weighted ↓	Sampling	Submitted time	Duration	Hyperparameter
VotingEnsemble	View explanation	0.99999	100.00 %	Jan 27, 2022 7:28 PM	3m 1s	algorithm : ['RandomForest', 'Grad ···
StackEnsemble		0.99999	100.00 %	Jan 27, 2022 7:31 PM	2m 25s	algorithm : ['RandomForest', 'Grad ···
StandardScalerWrapper, RandomForest		0.99999	100.00 %	Jan 27, 2022 6:45 PM	1m 9s	
RobustScaler, GradientBoosting		0.99998	100.00 %	Jan 27, 2022 6:48 PM	3s	criterion : friedman_mse learning ···
RobustScaler, LightGBM		0.99998	100.00 %	Jan 27, 2022 7:06 PM	2m 8s	boosting_type : goss colsample_ ···
RobustScaler, LightGBM		0.99997	100.00 %	Jan 27, 2022 7:22 PM	2m 0s	boosting_type : gbdt colsample_ ···
RobustScaler, LightGBM		0.99997	100.00 %	Jan 27, 2022 7:00 PM	2m 1s	boosting_type : gbdt colsample_ ···
MinMaxScaler, LightGBM		0.99997	100.00 %	Jan 27, 2022 7:10 PM	1m 51s	boosting_type : goss colsample_ ···
MaxAbsScaler, XGBoostClassifier		0.99996	100.00 %	Jan 27, 2022 6:28 PM	24s	tree_method : auto ···
StandardScalerWrapper, XGBoostClassifier		0.99996	100.00 %	Jan 27, 2022 6:51 PM	2m 40s	booster : gbtree colsample_bytr ···
RobustScaler, RandomForest		0.99995	100.00 %	Jan 27, 2022 7:14 PM	2m 5s	bootstrap class_weight : balance ···

Page 1 of 2

This job is using the new compute runtime to improve performance. You can expect to see a different log structure along with the new runtime.

shy_brush_5xy63zc5

Refresh | Deploy | Download | Explain model | Test model (preview) | Cancel | Delete

Details | Model | Explanations (preview) | Metrics | Data transformation (preview) | Test results (preview) | Outputs + logs | Images | Child runs | Snapshot | Monitoring (preview)

Model summary

Algorithm name
VotingEnsemble

Ensemble details
View ensemble details

AUC weighted
0.99999 View all other metrics

Sampling
100.00 %

Registered models
AutoML6bc15cac342:1

Deploy status
No deployment yet

PREDICTION PREVIEW CREATION

croprecomend

Details | Test | Consume | Deployment logs

data

N

P

K

temperature

humidity

ph

rainfall

croprecomend

Details | Test | Consume | Deployment logs

Input data to test real-time endpoint Test

Select editor type

(•) Form editor ( ) JSON editor

data

N
59

P
55

K
72

temperature
23

humidity
89

ph
6.5

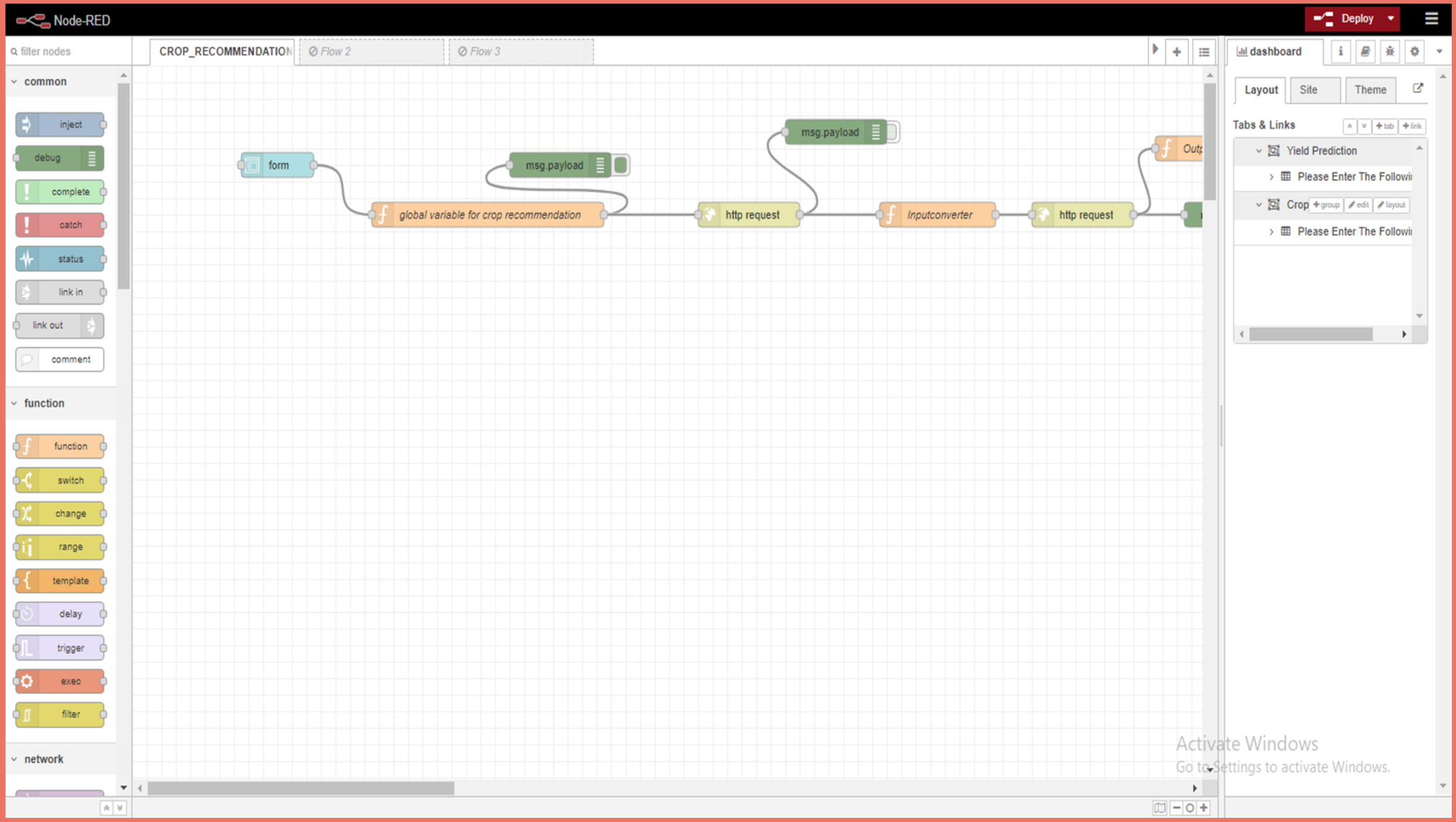
rainfall
120

Global parameters

Test result parsed | raw

```
{
  "Results": [
    "chickpea"
  ]
}
```

WEB SERVICE CONSTRUCTION USING Node-RED


Node-RED
Deploy
filter nodes
CROP_RECOMMENDATION
Flow 2
Flow 3
dashboard
Layout
Site
Theme
Tabs & Links
Yield Prediction
Please Enter The Followi
Crop
group
edit
layout
Please Enter The Followi
common
inject
debug
complete
catch
status
link in
link out
comment
function
function
switch
change
range
template
delay
trigger
exec
filter
network
form
msg.payload
global variable for crop recommendation
http request
msg.payload
Inputconverter
http request
Activate Windows
Go to Settings to activate Windows.

Cropify-Crop Recommender

Please Enter The Following Data

N

P *

K *

Temperature *

Humidity *

pH *

Rainfall *

SUBMIT CANCEL

The Recommended Crop is

THANK YOU!