Project Name: Analyze IoT sensor data with machine learning

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Module: Part 2: Build machine learning Model

Sub module: Download the Dataset

1. Download database

Sub module: Create Watson Studio project

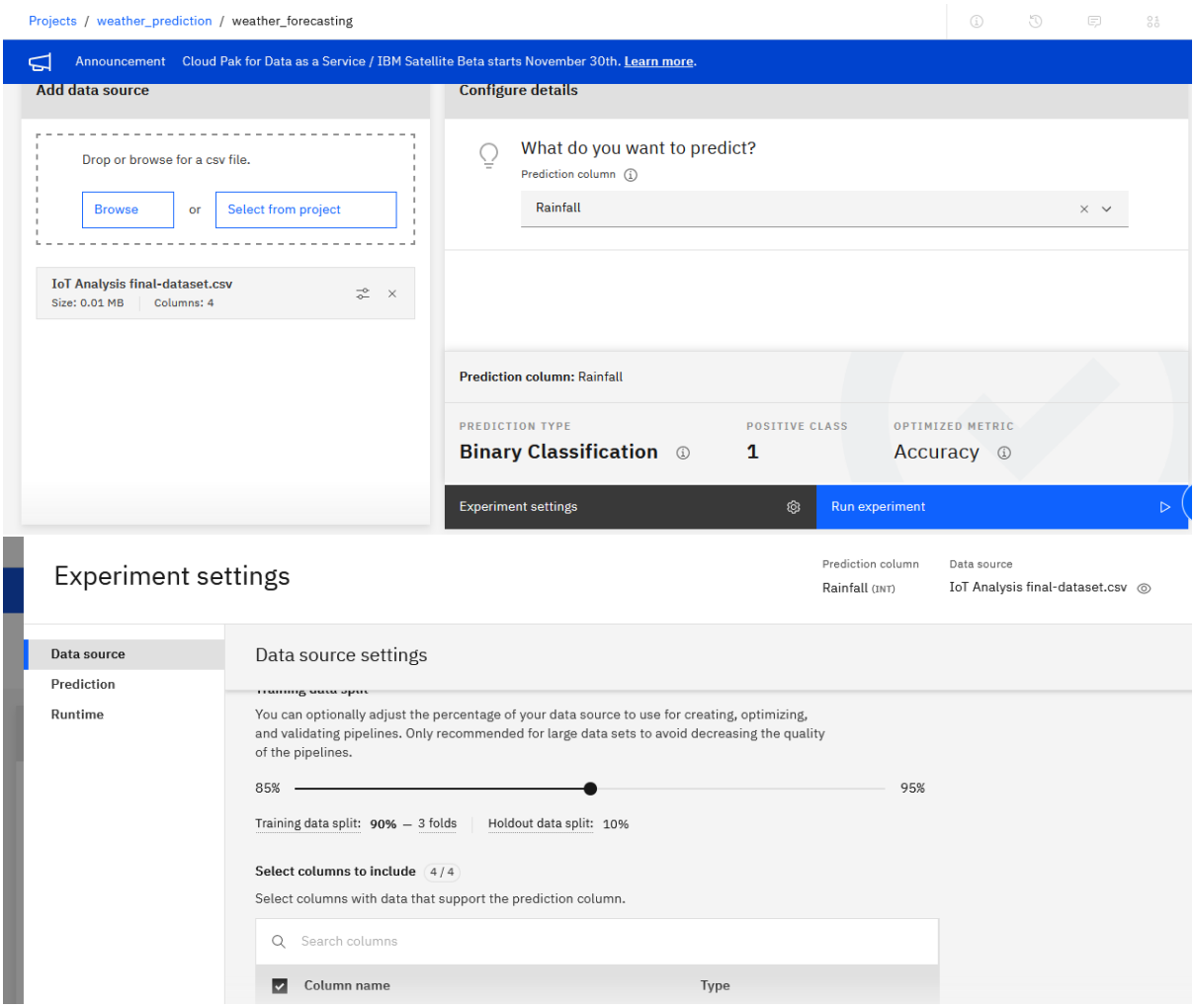
1. Go to Watson studio services.
2. Click create new project.
3. Click on create empty project.
4. Give “weather_prediction” as the name of the project.

Sub module: Add AutoAI to project and Create Watson Machine Learning instance

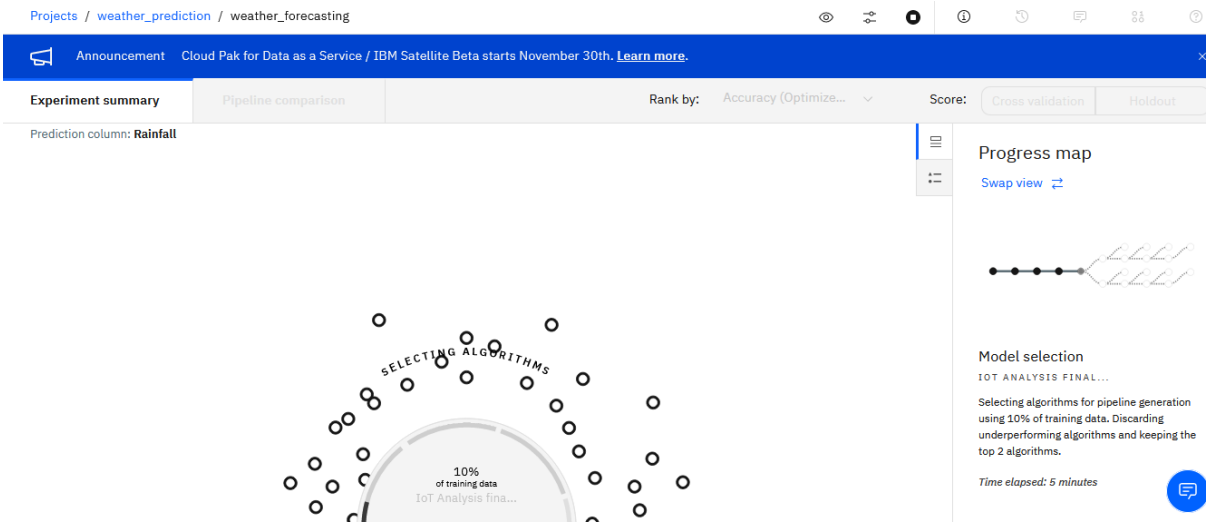
1. Click on add to project and select auto AI experiment
2. Click on new to create new Auto AI experiment
3. Give name of experiment I choose “weather-foracast”
4. Click on associate a machine learning service instance
5. Click on new service
6. Select Machine learning as new service and create it.
7. Select and click o associate service.
8. Click on reload option on AutoAI page.
9. Click on create on AutoAI page.

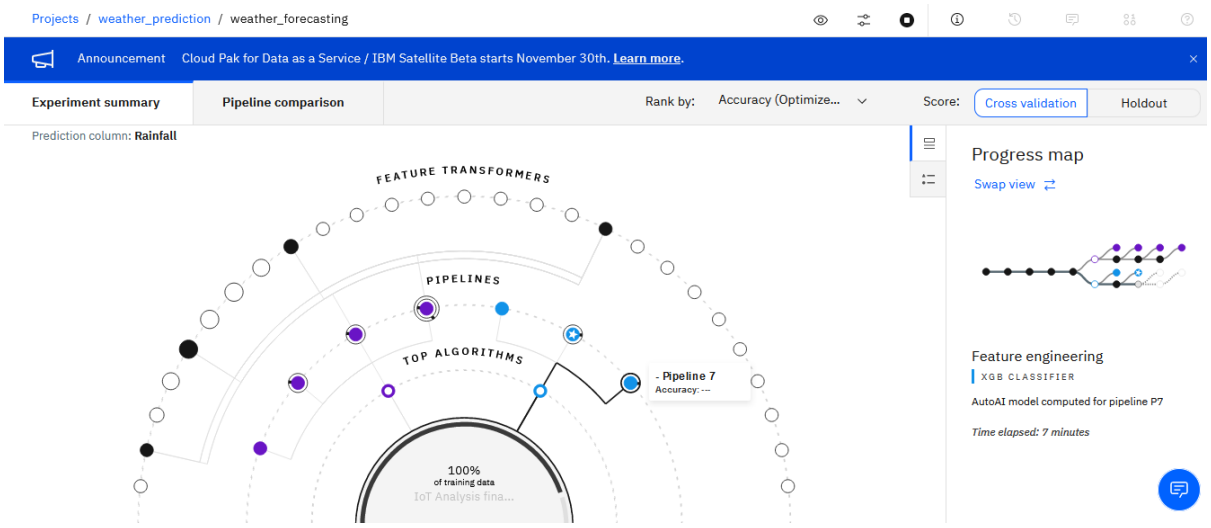
Sub module: Add Dataset to project and running experiment

1. Once data is added and select rainfall as output value
2. AutoAI automatically detect model as classification type.
3. It select Prediction Type as Binary classification

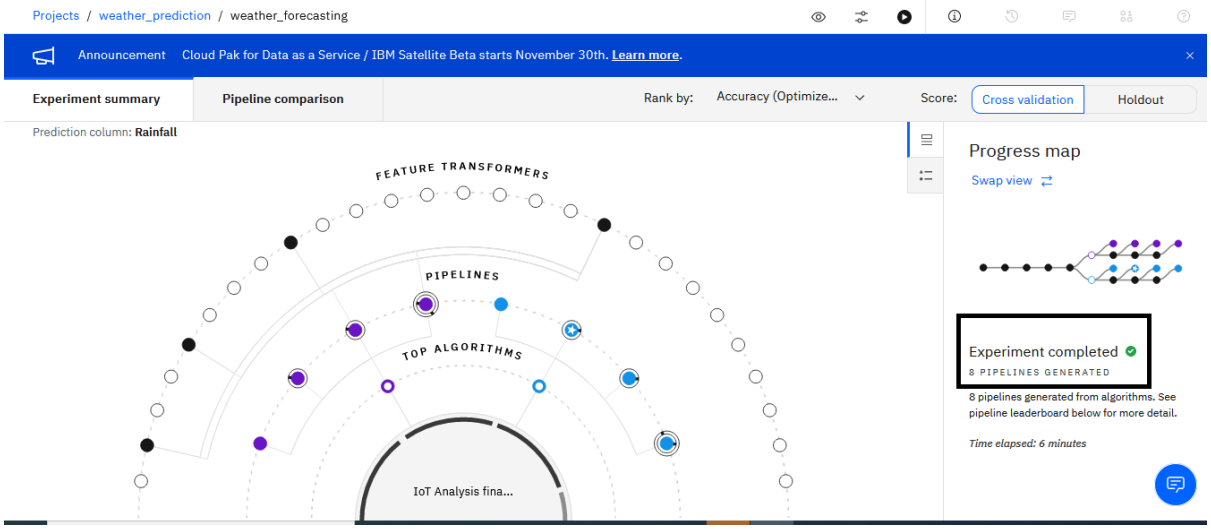


4. Select all the algorithms to run.
5. Run experiment

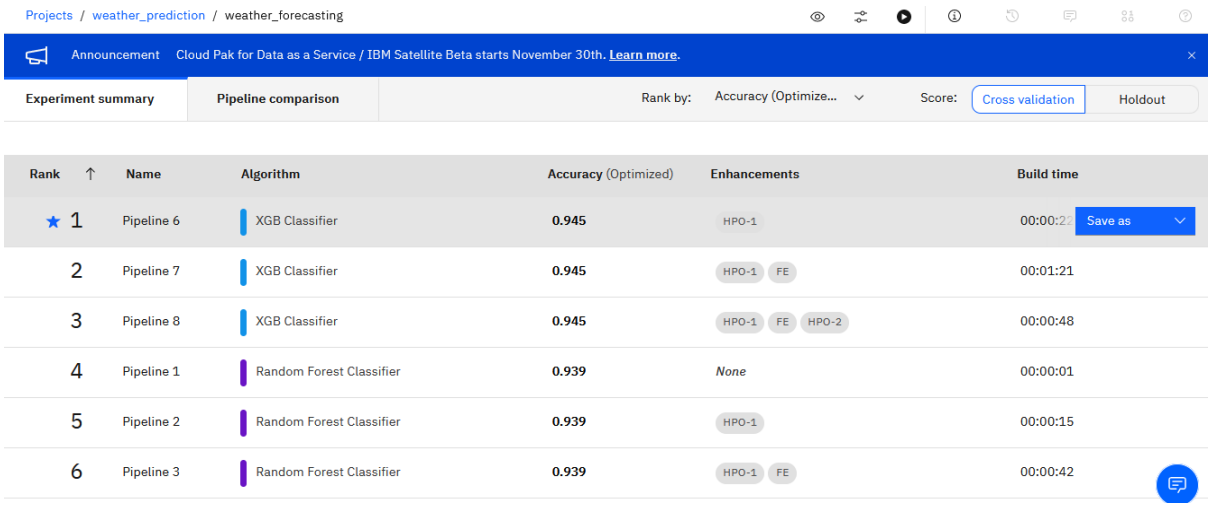




6. Experiment completed



7. find best model and save it



8. XGB classifier gives highest accuracy hence we save it.
9. Save the model by default name.
10. Click on view in project.

Sub module: Deployment of the model

1. Click on promote to deployment space.
2. Click on the new space to deploy the model.
3. Give the space name I give it weather-forecasting-model name.
4. Select cloud storage and Machine learning services.
5. Click on create.
6. Once create click on create.
7. Click on promote.
8. Once done go to the navigation icon and under deployment spaces click view all space.
9. Select your machine learning model.
10. Click on newly created model.
11. Click on deployment.
12. Under deployment tab click on online
13. Give the name of the model.
14. Click on deploy.
15. Model is deployed.
16. Click on deployed project.
17. We got URL of various field to use in python, JS, Java and cURL and API end point.