

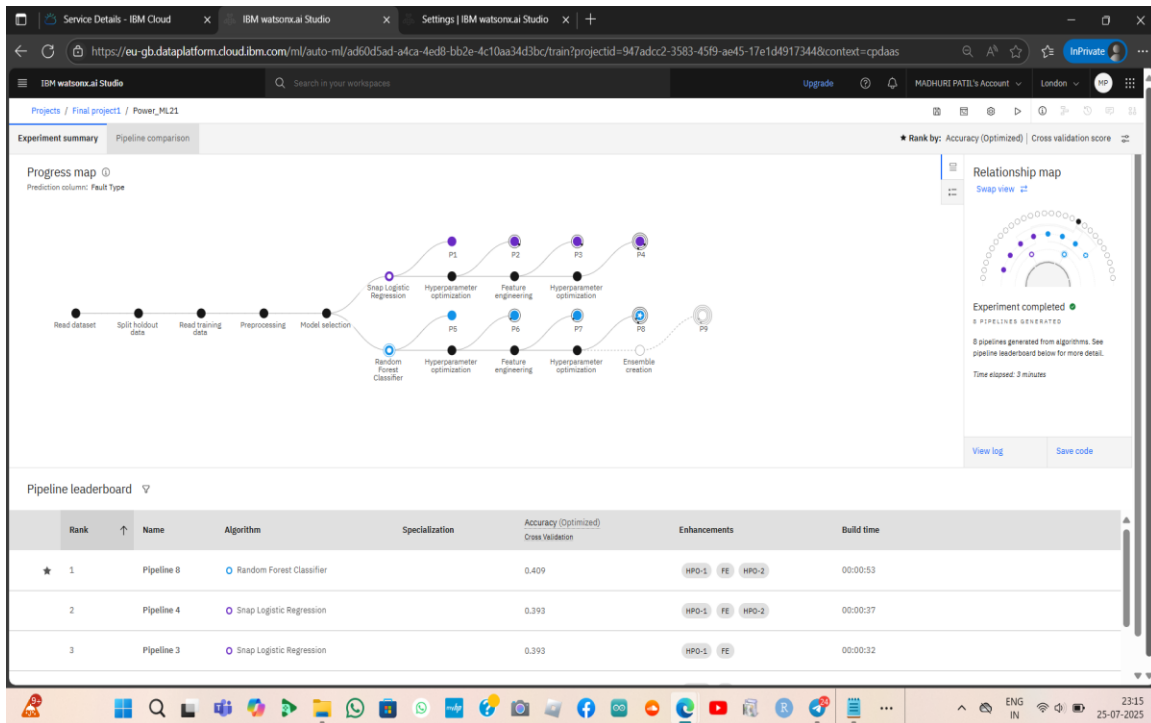
PowerIQ Project - Result Screenshots

"This document contains key result screenshots from the PowerIQ project along with brief descriptions highlighting the model's development, evaluation, and deployment process."

AutoAI Pipeline Overview

Description:

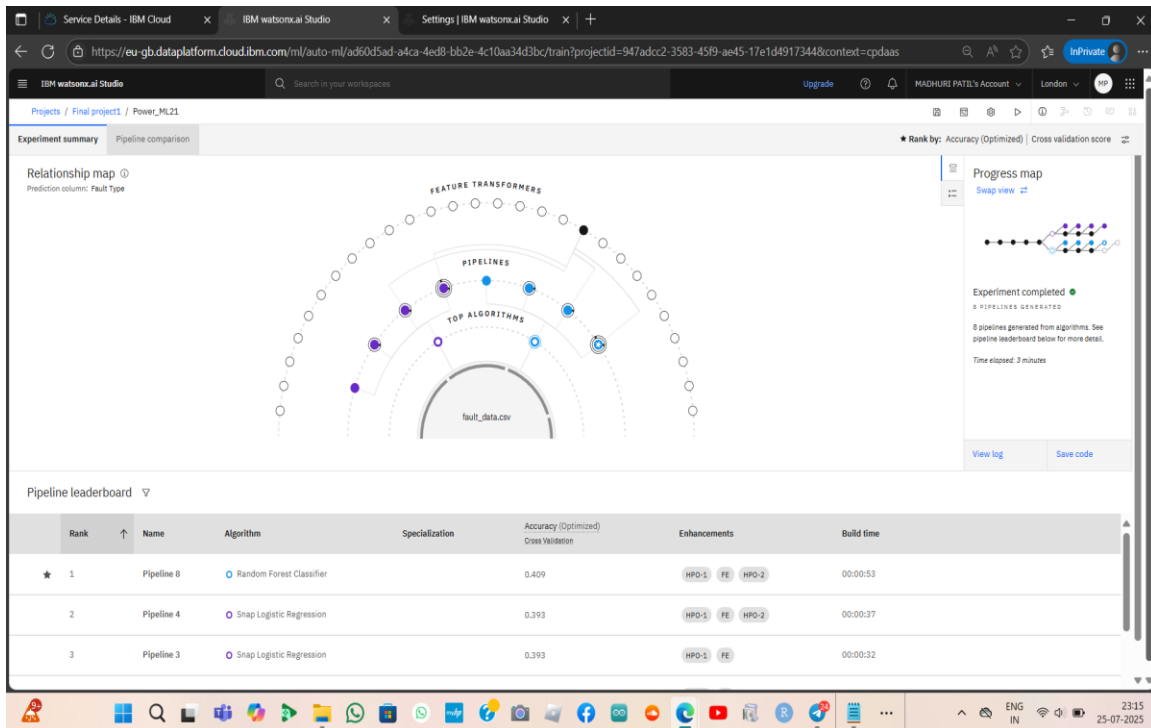
This screenshot showcases the automated machine learning pipeline built using IBM Watson Studio's AutoAI tool. It highlights the stages of data preprocessing, model selection, hyperparameter tuning, and final model ensemble, providing a clear overview of the end-to-end model generation process.



Pipeline Structure

Description:

This visual representation displays the connection between datasets, feature transformers, and multiple model pipelines. It offers insights into how AutoAI interprets the dataset and creates multiple candidate models for evaluation.



Test Input Interface

Description:

This interface demonstrates how test data can be manually entered to evaluate the deployed model's real-time prediction capabilities. It is designed for testing various electrical input parameters related to fault detection.

The screenshot shows the IBM Watson AI Studio interface for testing the Power_ML24 model. The 'Test' tab is active, and the 'Enter input data' section is displayed. A 'Text' input field is set to 'JSON'. Below the input field, a table of test data is shown, containing 10 rows and 12 columns. The table includes columns for Fault ID, Fault Location, Voltage, Current, Power Load, Temperature, Wind Speed, Weather Condition, and Maintenance Status. A 'Predict' button is located at the bottom right of the table.

Power_ML24 Deployed Online

API reference **Test**

Enter input data

Text JSON

Enter data manually or use a CSV file to populate the spreadsheet. Max file size is 50 MB.

[Download CSV template](#) [Browse local files](#) [Search in space](#) [Clear all](#)

	Fault ID (other)	Fault Location (Latitude, Longitude) (other)	Voltage (V) (double)	Current (A) (double)	Power Load (MW) (double)	Temperature (°C) (double)	Wind Speed (km/h) (double)	Weather Condition (other)	Maintenance Status
1	F048	34.2278,-118.6517	2159	250	48	34	18	Thunderstorm	Scheduled
2	F070	34.8426,-118.8105	2198	242	49	39	10	Windstorm	Scheduled
3	F141	34.1203,-118.3633	2287	183	52	25	10	Clear	Scheduled
4	F154	34.4219,-118.6425	2006	181	54	29	20	Windstorm	Completed
5	F256	34.2927,-118.8638	2298	232	54	29	18	Rainy	Pending
6	F003	34.0525,-118.244	2100	230	55	35	25	Windstorm	Pending
7	F428	34.0468,-118.5257	2042	191	47	26	22	Thunderstorm	Scheduled
8	F505	34.5034,-118.4528	2295	202	50	27	22	Snowy	Completed
9	F467	34.0118,-118.1422	2241	193	53	22	22	Windstorm	Completed
10	F333	34.1436,-118.27	1912	215	49	20	25	Windstorm	Completed

10 rows, 12 columns

Predict

Prediction Output

Description:

The final output screen presents the fault classification result based on the input parameters. It includes the predicted fault type along with its confidence score, validating the model's accuracy and effectiveness.

