

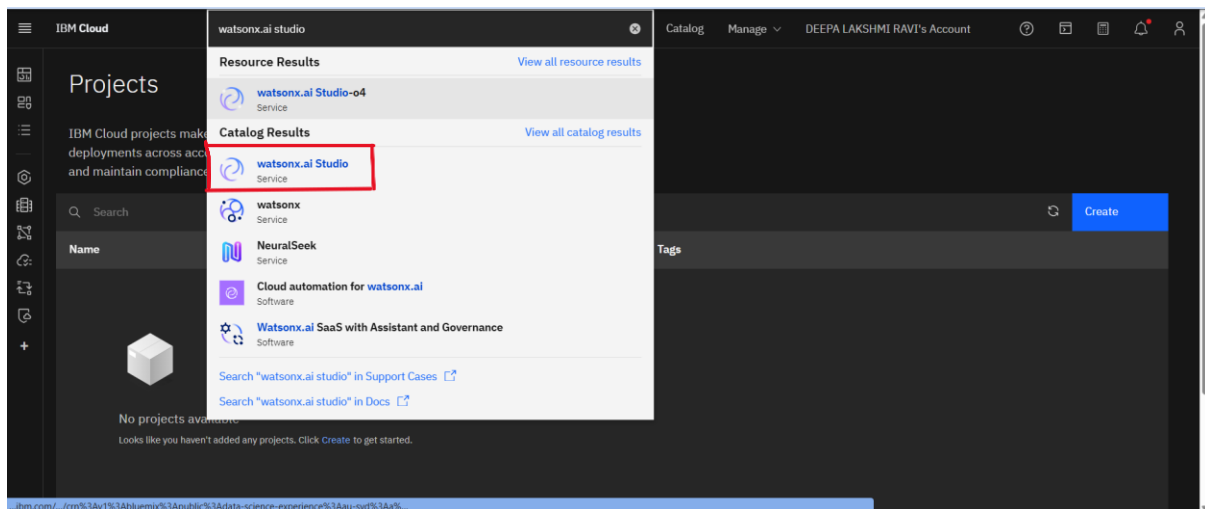
AI-Powered NSAP Pension Scheme Prediction Using IBM Cloud

1. Set up IBM Cloud

- Go to <https://cloud.ibm.com>
- Create a free **IBM Cloud Lite** account

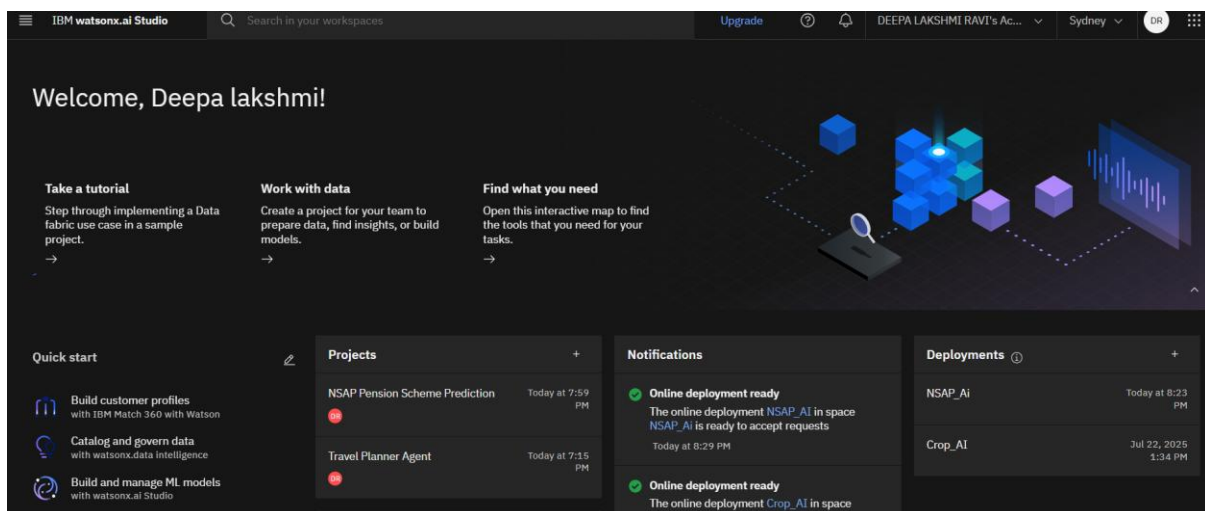
2. Launch Watsonx.ai Studio

- In the **IBM Cloud** dashboard, go to **Catalog**
- Search "**watsonx.ai**", click **Create**
- Launch **watsonx.ai Studio**



3. Create a Project

- Click “**Create Project**”
- Give a name: **NSAP Pension Prediction**
- Add **Cloud Object Storage** if prompted



4. Upload Dataset

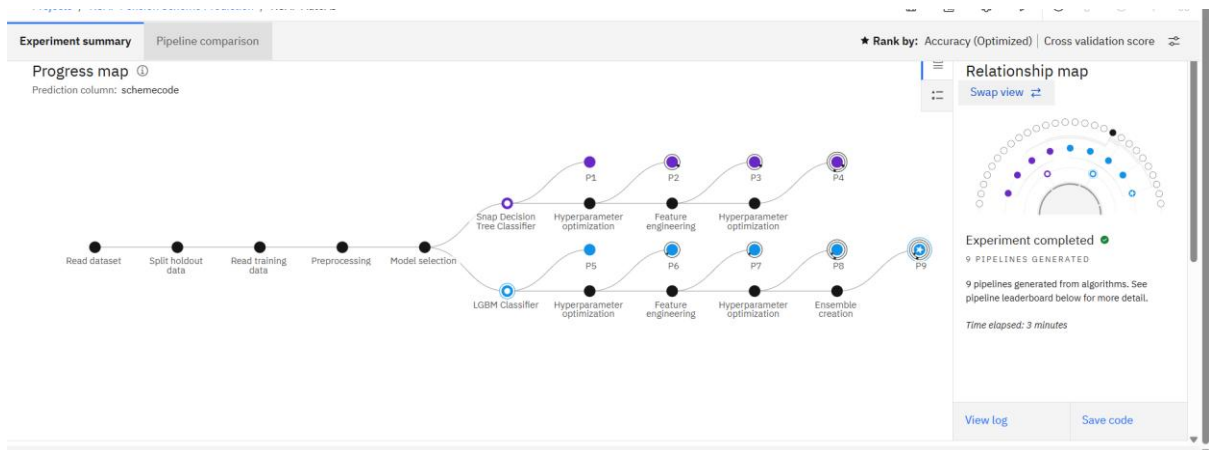
- Download dataset from:
[AI Kosh NSAP Pension Dataset](#)
- Inside your project → Go to **Assets > Add data asset**
- Upload the CSV file

The screenshot shows the IBM Watson AI Studio interface. The main area displays a table of data asset details. The table has columns: finyear, lgdstatedcode, statename, lgddistrictcode, districtname, schemecode, and totalbeneficiaries. The data is filtered to show 10 rows. The sidebar on the right provides details about the asset, including its name, description, tags, and modification history.

finyear	lgdstatedcode	statename	lgddistrictcode	districtname	schemecode	totalbeneficiaries
2025-2026	1	JAMMU AND...	1	ANANTNAG	IGNDPS	107
2025-2026	1	JAMMU AND...	1	ANANTNAG	IGNOAPS	8393
2025-2026	1	JAMMU AND...	1	ANANTNAG	IGNWPS	203
2025-2026	1	JAMMU AND...	10	POONCH	IGNDPS	310
2025-2026	1	JAMMU AND...	10	POONCH	IGNOAPS	5959
2025-2026	1	JAMMU AND...	10	POONCH	IGNWPS	382
2025-2026	1	JAMMU AND...	11	PULWAMA	IGNDPS	95
2025-2026	1	JAMMU AND...	11	PULWAMA	IGNOAPS	5037
2025-2026	1	JAMMU AND...	11	PULWAMA	IGNWPS	304
2025-2026	1	JAMMU AND...	12	RAJAURI	IGNDPS	77
2025-2026	1	JAMMU AND...	12	RAJAURI	IGNOAPS	8753
2025-2026	1	JAMMU AND...	12	RAJAURI	IGNWPS	380
2025-2026	1	JAMMU AND...	13	SRINAGAR	IGNDPS	124

5. Run AutoAI Experiment

- Click **New Asset > AutoAI Experiment**
- Choose your uploaded CSV as data source
- Select **target column**: schemecode
- Click **Run Experiment**



6. Choose Best Model

- Review model leaderboard (accuracy should be ~1.0)

- Click **Save as Model** for the top performer

Pipeline leaderboard ▾

	Rank ↑	Name	Algorithm	Specialization	Accuracy (Optimized) Cross Validation	Enhancements	Build time	
★	1	Pipeline 9	Batched Tree Ensemble Classifier (LGBM Classifier)	INCR	1	HPO-1 FE HPO-2 BATCH	00:00:31	Save as
	2	Pipeline 8	LGBM Classifier		1	HPO-1 FE HPO-2	00:00:29	
	3	Pipeline 7	LGBM Classifier		1	HPO-1 FE	00:00:21	
	4	Pipeline 6	LGBM Classifier		0.978	HPO-1	00:00:03	

7. Deploy the Model

- Go to **Deployment Space** > Create new if needed
- Promote model to space → Deploy it
- Click **Test** tab to try sample inputs and get predictions

IBM watsonx.ai Studio

Deployment spaces / NSAP_AI / P9 - LGBM Classifier: NSAP AutoAI

Deployments | Model details

Search

[New deployment](#)

Name	Type	Status	Tags	Last modified
NSAP_AI	Online	Deployed		46 minutes ago DEEPA LAKSHMI R (You)

Items per page: 20 | 1-1 of 1 items | 1 of 1 pages

About this asset

Name: P9 - LGBM Classifier: NSAP AutoAI

Description: No description provided.

Asset Details

Type: wml-hybrid_0.1
Model ID: 098f044e-db43-43...
Software specification: hybrid_0.1
Hybrid pipeline software specifications: autoai-kb_rt24.1-py3.11

Tags

Add tags to make assets easier to find.

Source asset details

8. Test the model online

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Deployment spaces / NSAP_AI / P9 - LGBM Classifier: NSAP AutoAI /

NSAP Prediction results

API

Display format for prediction results

☒ Table view ☐ JSON view

☐ Show input data

	prediction	probability
1	IGNDPS	[0.9995678875494785, 0.00023148145099385008, 0.00020063099952775053]
2		
3		
4		
5		
6		
7		
8		

[Download JSON file](#)

Result

- Model Accuracy: **100%**

- Type: **Multi-class Classification**
- Input: Beneficiary data like gender, caste, Aadhaar status
- Output: Scheme name (e.g., IGNOAPS, IGNDPS, IGNWPS)

End Users

- Government welfare departments
- District data officers
- Citizen Service Centers (CSCs)
- Pension applicants (via UI/API)

Wow Factor

- Built using **IBM AutoAI with no code**
- Achieved **100% model accuracy**
- End-to-end pipeline: Upload → Train → Deploy → Predict
- Scalable for **PAN-India scheme automation**

Conclusion

This project simplifies pension scheme classification using AI. It reduces manual work, improves delivery speed, and ensures that the right beneficiaries receive the right benefits.