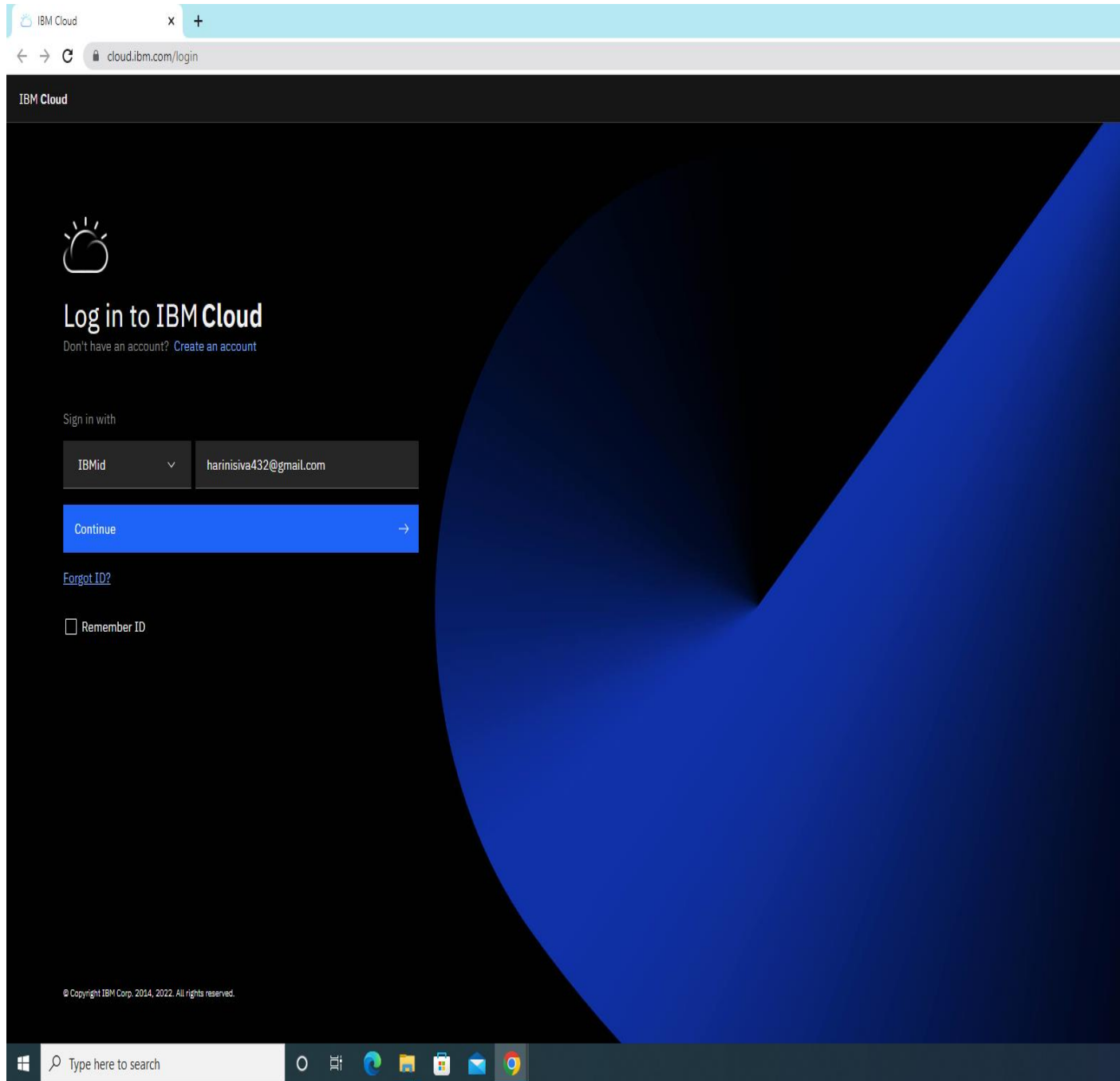


Register For IBM Cloud



Service Details - IBM Cloud

cloud.ibm.com/services/data-science-experience/crn%3Av1%3Abluemix%3Apublic%3Adata-science-experience%3Aus-south%3Aa%2F44a914d56e8b4249988662d2a88f6dcb%3A0af7b4c0-0481-449d-9f2e-74e74ae596de%3A%3

IBM Cloud

Search resources and products...


Q Catalog Manage Harinipriya S's Account

Resource list /

Watson Studio-ai Active Add tags

Manage

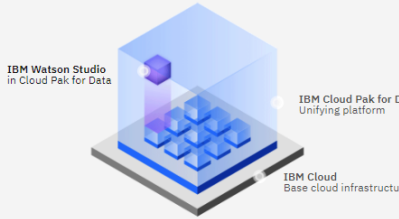
Plan



Watson Studio in Cloud Pak for Data

Watson Studio is one of the core services in Cloud Pak for Data as a Service. Build, deploy and manage AI models, and optimize decisions on IBM Cloud Pak for Data.

Launch in IBM Cloud Pak for Data



IBM Watson Studio in Cloud Pak for Data

IBM Cloud Pak for Data Unifying platform

IBM Cloud Base cloud infrastructure

IBM Watson Studio is part of IBM Cloud Pak for Data and serves as the data science capability of the data fabric architecture.

Helpful links

Documentation

Learn about tools, features, and how to perform a wide variety of Data and AI tasks.

Learning path

Start a step-by-step tutorial to get up and running quickly.

Videos

Watch videos to learn about Service.


How to use Watson Studio

Build, deploy, and trust AI models

Build, deploy and manage AI models, and optimize decisions anywhere on IBM Cloud Pak* for Data. Get started with uniting teams, automating AI lifecycles and speed time to value on an open multicloud architecture.

Windows Taskbar

Type here to search



IBM Watson Studio

dataplatform.cloud.ibm.com/home2?context=cpdaas&apps=data_science_experience&nocache=true&quick_start_target=data_science_experience

IBM Watson Studio

Search in your workspaces

Buy

Welcome, Harinipriya!

Take a tutorial

Step through implementing a Data fabric use case in a sample project.

[→](#)

Work with data

Create a project for your team to prepare data, find insights, or build models.

[→](#)

Learn what's new

Stay current with new features, enhancements, and other changes.

[→](#)

Quick start

Create data pipelines with DataStage

Build customer profiles with IBM Match 360 with Watson

Catalog and govern data with Watson Knowledge Catalog

Build and manage ML models with Watson Studio

Query data anywhere with Watson Query

What's new

Spark 3.3 replaces Spark 3.2 for Watson Studio and Watson Machine Learning
Nov 18, 2022

Manage settings for data protection rules (Watson Knowledge Catalog)

Projects

Real-Time Communication System
Powered By AI For Specially Able
Oct 15, 2022 01:03 PM

New in gallery

NOTEBOOK
Use AutoAI and Lale to predict credit risk with...
Learn how to use AutoAI experiments in this notebook by getting a German credit data set and train the model to predict banking credit. Then, compare several trained models for quality and select best one for further refi

Explore

Notifications

No notifications
You will see your most recent notifications here.

Deployments

No deployment spaces
After you create spaces

New deployment space

Type here to search

The screenshot displays the IBM Watson Studio web interface. At the top, the browser address bar shows the URL: `dataplatfom.cloud.ibm.com/analytics/notebooks/v2/69db2065-565e-44e8-881f-6bf17ef5f9fd?projectid=2ccc06bc-5f00-406c-b13e-14e2e90cc1b5&context=cpdaas`. The page header includes the 'IBM Watson Studio' logo and a search bar. The breadcrumb navigation shows the path: `Projects / Real-Time Communication System / IBM_Model_Training_Communication`. The main content area shows a notebook titled `IBM_Model_Training_Communication.ipynb` in the 'Instantiating runtime' state. A blue progress bar indicates 26% completion. Below the progress bar, the text reads: 'Instantiating runtime for IBM_Model_Training_Communication_Project.ipynb. The selected runtime has 2 vCPU and 8 GB RAM. It consumes 1 capacity unit per hour.' The bottom of the image shows the Windows taskbar with various application icons.

Model Training for Real Time Communication through AI for Specially Abled

Loading the Dataset & Image Data Generation

```
In [1]: pwd
```

```
1]: '/home/wsuser/work'
```

```
In [2]: !pip install tensorflow==2.7.1
```

```
Collecting tensorflow==2.7.1
  Downloading tensorflow-2.7.1-cp39-cp39-manylinux2010_x86_64.whl (495.2 MB)
    Requirement already satisfied: keras-preprocessing>1.1.1 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (1.1.2)
    Requirement already satisfied: astunparse>=1.6.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (1.6.3)
    Requirement already satisfied: tensorboard>=2.6 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (2.7.0)
    Requirement already satisfied: numpy>=1.12.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (1.15.0)
    Requirement already satisfied: numx>=1.14.5 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (1.20.3)
    Requirement already satisfied: wheel<1.0,>=0.32.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (0.37.0)
    Requirement already satisfied: protobuf>=3.9.2 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (3.19.1)
    Requirement already satisfied: typing-extensions>=3.6.6 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (4.1.1)
    Requirement already satisfied: keras<2.8,>=2.7.0rc0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (2.7.0)
    Requirement already satisfied: opt-einsum>=2.3.2 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (3.3.0)
    Requirement already satisfied: wrapt>=1.11.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (1.12.1)
    Requirement already satisfied: termcolor>=1.1.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (1.1.0)
    Requirement already satisfied: tensorflow-estimator<2.8,>=2.7.0rc0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (2.7.0)
    Requirement already satisfied: google-pasta>=0.1.1 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (0.2.0)
    Requirement already satisfied: gast<0.5.0,>=0.2.1 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (0.4.0)
    Requirement already satisfied: tensorflow-io-gcs-filesystem>=0.21.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (0.23.1)
    Requirement already satisfied: h5py>=2.9.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (3.2.1)
    Requirement already satisfied: flatbuffers<3.0,>=1.12 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (2.0)
Collecting libclang>=9.0.1
  Downloading libclang-14.0.6-py2.py3-none-manylinux2010_x86_64.whl (14.1 MB)
    Requirement already satisfied: absl-py>=0.4.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (0.12.0)
    Requirement already satisfied: grpcio<2.0,>=1.24.3 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorflow==2.7.1) (1.42.0)
    Requirement already satisfied: google-auth<3,>=1.6.3 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorboard>=2.6->tensorflow==2.7.1) (1.23.0)
    Requirement already satisfied: tensorboard-data-server<0.7.0,>=0.6.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorboard>=2.6->tensorflow==2.7.1) (0.6.1)
    Requirement already satisfied: werkzeug>=0.11.15 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorboard>=2.6->tensorflow==2.7.1) (2.0.2)
    Requirement already satisfied: markdown>=2.6.8 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorboard>=2.6->tensorflow==2.7.1) (3.3.3)
    Requirement already satisfied: google-auth-oauthlib<0.5,>=0.4.1 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorboard>=2.6->tensorflow==2.7.1) (0.4.4)
    Requirement already satisfied: tensorboard-plugin-wit>=1.6.0 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from tensorboard>=2.6->tensorflow==2.7.1) (1.6.0)
```