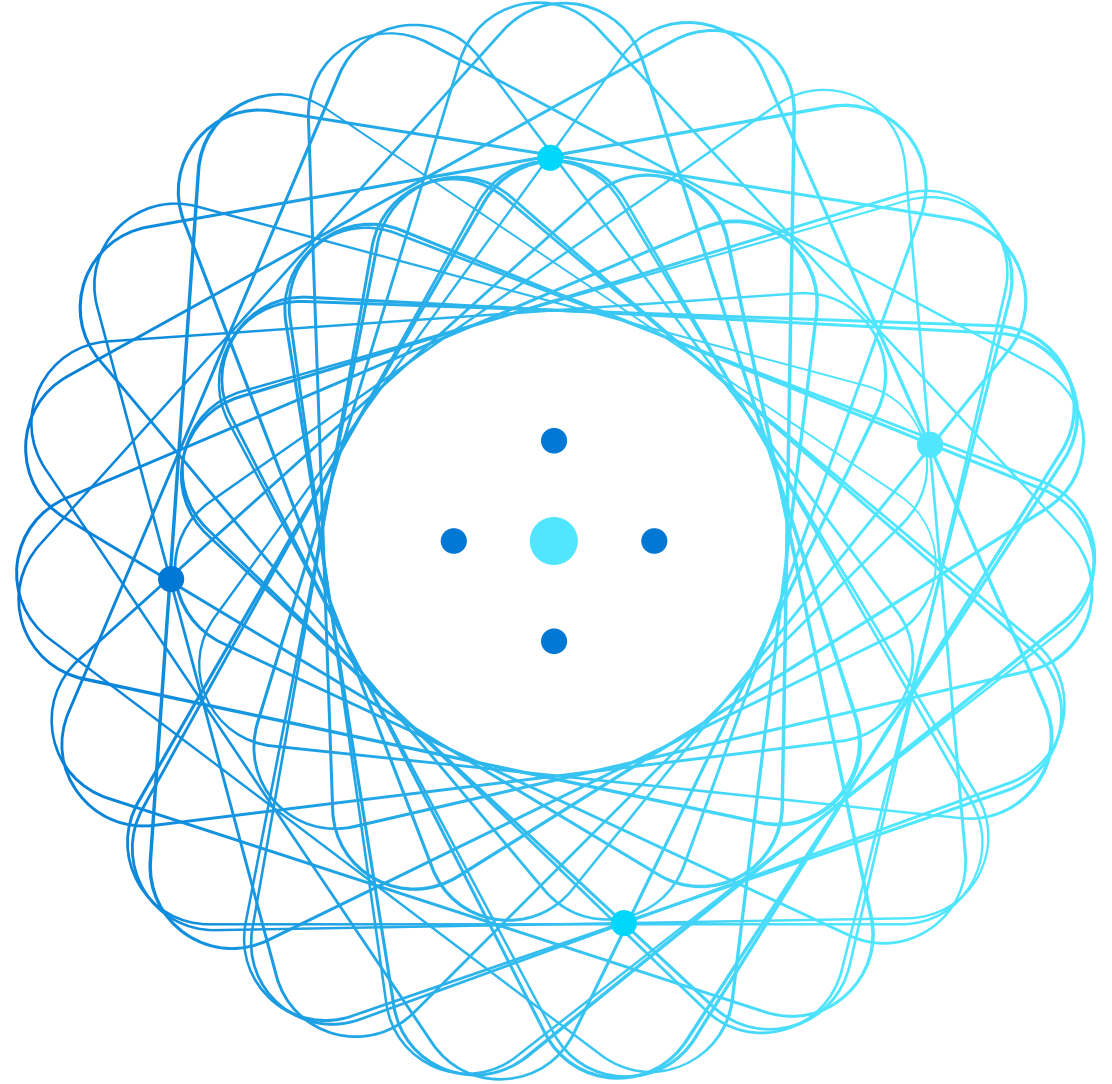


Track model training in Jupyter notebooks with MLflow



Module Agenda



Track model training in notebooks with MLflow

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Use MLflow for model tracking in notebooks

You can create and edit notebooks within Azure Machine Learning or on a local device. Notebooks are ideal for exploration and development. To track your work, you can use MLflow.

MLflow is an open-source library for tracking and managing your machine learning experiments. **MLflow Tracking** is a component of MLflow that logs everything about the model you're training, such as **parameters**, **metrics**, and **artifacts**.

MLflow is already configured on Azure Machine Learning compute instances.

Configure MLflow for model tracking in notebooks(2/2)

To use MLflow when running notebooks on your local device:

- Install the `mlflow` and `azureml-mlflow` package.
- Get the value of the MLflow tracking URI from the Azure portal.
- Use the following code in your local notebook to configure MLflow to point to the Azure Machine Learning workspace:

Python

```
mlflow.set_tracking_uri = "MLFLOW-TRACKING-URI"
```

Train and track models in notebooks

Create an MLflow experiment:

- You can create a MLflow experiment, which allows you to group runs.
- To create an experiment, run the command on the right in your notebook.

Log results with MLflow:

- To track the model, you can enable automatic logging and use custom logging.

Python

```
import mlflow
```

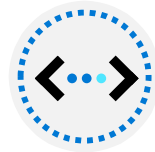
```
mlflow.set_experiment(experiment_name  
="heart-condition-classifier")
```

Exercise - Track model training

In this exercise, you will:

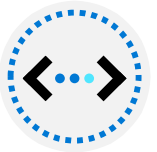
Task 1:

Train and track a model with autologging.



Task 2:

Train and track a model with custom logging.



Instructions

Follow these instructions to complete the exercise:

1. View the exercise repo at <https://microsoftlearning.github.io/mslearn-azure-ml/>.
2. Complete the **Track model training in notebooks with MLflow** exercise.

Knowledge check



You want to train a diabetes classification model with the scikit-learn library. You want to focus on experimenting with the model, and minimize the effort needed to log the model's results. What logging method should you use?

- Autologging
 - Custom logging
 - A combination of autologging and custom logging.
-



When you use MLflow tracking when training a model in a notebook running on Azure Machine Learning compute, on which tab in the studio can you view the model's results?

- Data
- Models
- Jobs

