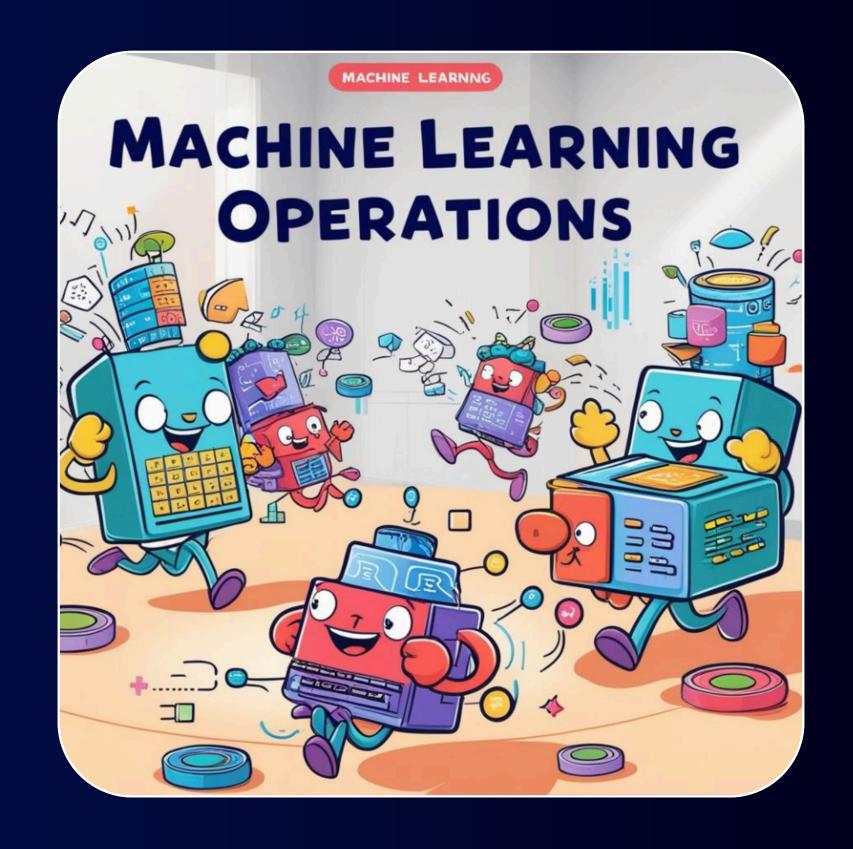


# MACHINE LEARNING OPERATIONS



Presented by Asst. Prof. Dr. Tuchsanai Ploysuwan



#### notebook\_v1

Logistic Reg C = 1solver = 'lbfgs"

## Dataset V1

### notebook\_v2

Logistic Reg C = 0.1solver = 'saga"



Dataset **V1** 

#### notebook\_v3

XGBoost  $max_depth = 3$ solver = 'saga"



Dataset ۷1

#### notebook\_v4

**XGBoost**  $max_depth = 3$ solver = 'saga"



Dataset <u>V2</u>

Additional feature f10



Kathy

notebook\_v5

notebook\_v6

notebook\_v7

notebook\_v8

Random Forest criterion = 'gini'

Random Forest criterion = 'entropy'

XGBoost max\_depth = 4 learning\_rate=0.01 XGBoost max\_depth = 3 learning\_rate=0.01



Dataset V10

0



Dataset V10



Dataset V10



Dataset V20

Additional feature f10



| Run_id | Date      | User   | Model         | Params                    | Dataset | F1 Score ('macro') | Recall (Class=1) | Accuracy |
|--------|-----------|--------|---------------|---------------------------|---------|--------------------|------------------|----------|
| 1      | 1-Jul-24  | Kathy  | Logistic Reg  | C=1, Solver='lbfgs'       | V1      | 0.75               | 0.62             | 0.71     |
| 2      | 2-Jul-24  | Kathy  | Logistic Reg  | C=1, Solver='saga'        | V1      | 0.78               | 0.58             | 0.62     |
| 3      | 6-Jul-24  | Kathy  | XGBoost       | max_depth=3,solver='saga' | V1      | 0.82               | 0.72             | 0.75     |
| 4      | 9-Jul-24  | Kathy  | XGBoost       | max_depth=3,solver='saga' | V2      | 0.87               | 0.74             | 0.77     |
| 5      | 28-Jun-24 | Venkat | Random Forest | criterion='gini'          | V10     | 0.71               | 0.87             | 0.82     |
| 6      | 2-Jul-24  | Venkat | Random Forest | criterion='entropy'       | V10     | 0.67               | 0.84             | 0.81     |
| 7      | 10-Jul-24 | Venkat | XGBoost       | max_depth=4, lr=0.01      | V10     | 0.83               | 0.92             | 0.79     |
| 8      | 11-Jul-24 | Venkat | XGBoost       | max_depth=3, lr=0.01      | V20     | 0.82               | 0.89             | 0.84     |

# Here's a simple command to run MLflow with its tracking server:

#### create directory

mkdir -p MLflow # -p flag ensures no error if directory already exists
cd MLflow

#### O

## **Run MLflow UI with Docker**

```
docker run -d \
  -p 5000:5000 \
  -v "$(pwd):/mlflow" \
  ghcr.io/mlflow/mlflow:latest \
  mlflow ui \
  --backend-store-uri file:///mlflow \
  --host 0.0.0.0
```

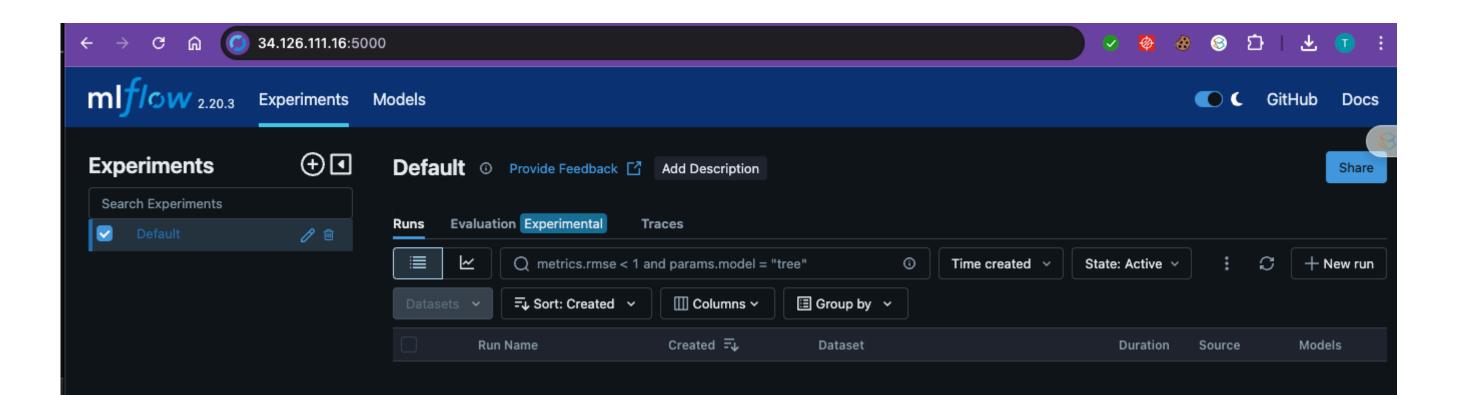
#### ر 🗆

#### **Verify It Works:**

After running, check

http://ip\_address:5000







#### No runs logged

No runs have been logged yet. Learn more about how to create ML model training runs in this experiment.