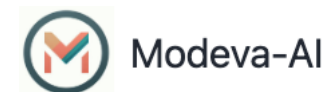
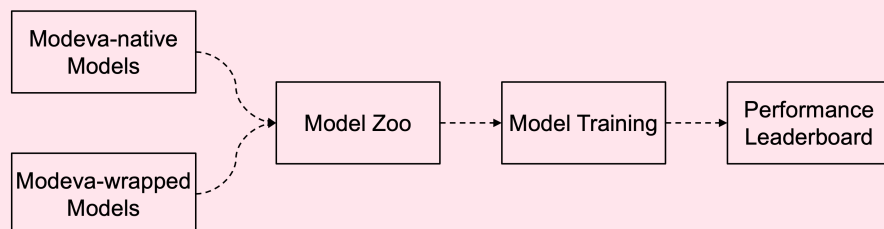


Model Zoo with Modeva :: CHEATSHEET



ModelZoo provides a centralized repository for model registry and management. It comes with convenient APIs for model training and performance leaderboard.



INSTALLATION: Modeva is a Python package you can install directly by pip.

```
pip install modeva
```

ModelZoo Class: requires DataSet with splits

```
from modeva import ModelZoo
mz = ModelZoo(name, dataset)
```

Model Zoo

Example: TaiwanCredit dataset with random splits

```
from modeva import DataSet
ds = DataSet(); ds.load("TaiwanCredit"); ds.set_random_split()
```

Create a model zoo

```
from modeva import ModelZoo
mz = ModelZoo(name="TwCreditMZ", dataset=ds)
```

Model Training

```
mz.train(name="XGB2")
mz.train_all()
```

Performance Leaderboard: support ordering by train or test accuracy metrics

```
mz.leaderboard(order_by: str)
```

Modeva-native Models

Example: MoXGB2 model

```
from modeva.models import MoXGBClassifier
mz.add_model(model=MoXGBClassifier(name="XGB2", max_depth=2, eta=0.3,
    n_estimators=100))
```

Modeva-wrapped Models

Example: Scikit-learn MLP model

```
from modeva.models.wrappers.api import MoSKLearnClassifier
from sklearn.neural_network import MLPClassifier
mz.add_model(model=MoSKLearnClassifier(name="SkMLP", estimator=
    MLPClassifier(hidden_layer_sizes=[10]*2, activation="tanh")))
```

Model Zoo Utilities

Display dataset and models

```
mz.datasets
mz.models
```

Get a model object

```
mz.get_model(name="XGB2")
mz.list_model_names()
```

Register models to MLFlow

```
mz.register()
mz.load_registered_models()
mz.list_registered_models()
mz.delete_registered_model()
```