
H2O.ai

H2OAutoML Python Syntax

```
# Set up automatic machine learning experiment
aml = H2OAutoML(nfolds = 5, max_runtime_secs = 3600, max_models = None,
                stopping_metric = 'AUTO', stopping_tolerance = None,
                stopping_rounds = 3, seed = None, project_name = None,
                exclude_algos = None)
```

```
# Train models
aml.train(x = None, y = None, training_frame = None, fold_column = None,
          weights_column = None, validation_frame = None,
          leaderboard_frame = None)
```


python
TM

Case Study: Lending Club Dataset

- Loan data from 2007 up until 2015 including rejected applications and accepted applications.
- Of the 500k accepted applicants about 160k loans have either been completely paid off or defaulted.
- There are about 4 million applicants in the rejected loans dataset.
- **Use Case 1**: Predict the likelihood of a user defaulting based on the information supplied when applying for a loan.
- **Use Case 2**: Determine the interest rate Lending Club would have offered the user based on the information supplied when applying for a loan.
- Full Data: https://www.kaggle.com/wendykan/lending-club-loan-data
- H2O Subset: https://s3.amazonaws.com/h2o-public-test-data/bigdata/laptop/lending-club/loan.csv

H2OAutoML Python Syntax


```
# Set up automatic machine learning experiment
aml = H2OAutoML(nfolds = 5, max_runtime_secs = 3600, max_models = None,
                stopping_metric = 'AUTO', stopping_tolerance = None,
                stopping_rounds = 3, seed = None, project_name = None,
                exclude_algos = None)
```

```
# Train models
aml.train(x = None, y = None, training_frame = None, fold_column = None,
          weights_column = None, validation_frame = None,
          leaderboard_frame = None)
```