LEARN AI DAY

Hands-on Lab Session Instructions

Meredith Mante: Build a Rapid Prototype with Watson Studio AutoAl

9:30 am ET

Platform Requirements:

IBM Cloud account with Watson Studio setup and a Watson Machine Learning service added. All of the required Python libraries are already available in the Watson Studio notebook environment.

Data Requirements:

The lab will use a real estate valuation data set (provided here as a .csv file) from the UCI Machine Learning Repository. The data needs to be in .csv format in order to run a Watson Studio AutoAI Experiment. More details about the data set can be found here: http://archive.ics.uci.edu/ml/datasets/Real+estate+valuation+data+set.

Skills Requirements:

Familiarity with the Data Science workflow including feature engineering, machine learning models, hyperparameter optimization and model evaluation measures is required. You'll be working with a Python notebook. Knowledge of the scikit-learn library is helpful.

Chris Fregly: Hands-on with Kubflow Pipelines

10:30 am ET

This lab will be facilitated through the <u>Katacoda platform</u>. <u>Click here to create an account before starting</u>

Austin Eovito: Explainable Data Science with Lale and AIX360

11:30 am ET

Data Source: https://archive.ics.uci.edu/ml/datasets/Covertype

-Make sure to save this in your working folder to avoid pathing issues

Lab requirements:

- -Python 3.7x
- -Jupyter Lab [or IDE of choice]
- -Scikit-Learn
- -XGBoost.
- -Pandas
- -Numpy
- -Lale
- -AIX360

INSTALL WITH BELOW COMMAND/S:

Assuming you have miniconda or anaconda, open terminal and enter the below code:

-'conda create -n <env_name> python=3.7'

Restart your terminal:

-Run: 'conda activate <env_name>'

You should see <location in terminal> (env_name) \$:

-Run: 'pip install jupyterlab, scikit-learn, pandas, numpy, lale, aix360, xgboost'

You should be ready to go! Now you can run 'Jupyter lab' from terminal in your environment, and the IDE should open and you are now ready to follow along!

Samuel Hoffman: Removing Unfair Bias in Machine Learning

2:30 pm ET

Here is a link to the PDF For Sam's session

<u>Miguel Maldonado:</u> Deploying your First Al Application: Leveraging Node, Cloud CLI and Watson Al Apps.

2:00 pm ET

Install the IBM Cloud CLI before the workshop

- Please go through the tutorial on how to download the IBM Cloud CLI. Find the tutorial here:
 <u>Getting started with the IBM Cloud CLI and Developer Tools commands</u>.
 To verify you have installed the tutorial correctly, run the command "ibmcloud dev help" as indicated on Step 2 of the installation tutorial. If you see output and no errors, you are good to go!
- (Optional) At the end of that tutorial, you will notice the section Next Steps: Creating and deploying apps by using the CLI, which outlines exercises similar to the ones we will go through on the workshop. Feel free to explore some of those exercises, that help you gain experience and come ready with questions.

I look forward to deploying some AI Apps together!