Programming Assignment: Classification

You have not submitted. You must earn 1/1 points to pass.

Deadline Pass this assignment by October 14, 11:59 PM PDT

Instructions

My submission

Discussions

Classify data you've generated yourself!

The purpose of this programming assignment is to learn how to classify a data set. You will generate this data set on your own.

Here a summary what you will do.

1. Using the data generation pipeline from the last assignment you will record two different movement patterns

2. In NodeRED you will change the CLASS to "0" for one case and to "1" for the other case

3. Train and tune an Apache SparkML classifier

Please understand that in the discussion forum we can only support learners on the IBM Cloud – since we know this environment very well and it is the same for all learners.

Please follow those steps:

1. Make sure, that your smartphone app is connected and creates and sends data to the cloud

2. Verify in NodeRED if your data is arriving using the debug panel of NodeRED

3. In the “cloudant connector node” change the database from “shake” to “shake_classification”

4. In the “function” node, please make sure you’ve set the CLASS to 0

5. Click on “deploy”, make sure your phone lies on the table without further movement, please also make sure your screen doesn’t lock since this will the browser cause to stop sending data

6. Keep it running for about 1000-2000 messages

Now please repeat step 1-6 with the following differences (Note: It is very important that you don’t record data when you phone is lying on the table since it would confuse the classes, just make sure whenever you are recording CLASS 1 data that the phone continuously moves)

1. In the “function” node change CLASS from 0 to 1.

2. Click on “deploy” and again record 1000-2000 messages

3. Now here comes the tricky part: Shake your phone as hard as you can in all three different axis and please make sure, before you stop shaking to change back the database name in the “cloudant connector node” to “shake” and click deploy

So now you are all settled to implement your classifier and submit your solution to the grader by importing the following notebook into Watson Studio and follow the instructions there.

https://raw.githubusercontent.com/IBM/coursera/master/coursera_ml/AssignmentML2.ipynb

Again, you can have a look at the notebook here:
https://github.com/IBM/coursera/blob/master/coursera_ml/AssignmentML2.ipynb

How to submit

Copy the token below and run the submission script included in the assignment download. When prompted, use your email address **gpudja@gmail.com**.

Generate new token

Your submission token is unique to you and should not be shared with anyone. You may submit as many times as you like.