Machine Learning Tryout

Duration: 3 hours

Teams of 2

In this challenge, you will create an application that will predict the amount of forest area that will burn given specific weather and date attributes.

Dataset: <u>Here</u>

Your program should take parameters as input and should be accompanied by a README that explains exactly how to run it.

Information about the dataset:

```
1. X - x-axis spatial coordinate within the Montesinho park map: 1 to 9
2. Y - y-axis spatial coordinate within the Montesinho park map: 2 to 9
3. month - month of the year: 'jan' to 'dec'
4. day - day of the week: 'mon' to 'sun'
5. FFMC - FFMC index from the FWI system: 18.7 to 96.20
6. DMC - DMC index from the FWI system: 1.1 to 291.3
7. DC - DC index from the FWI system: 7.9 to 860.6
8. ISI - ISI index from the FWI system: 0.0 to 56.10
9. temp - temperature in Celsius degrees: 2.2 to 33.30
10. RH - relative humidity in %: 15.0 to 100
11. wind - wind speed in km/h: 0.40 to 9.40
12. rain - outside rain in mm/m2: 0.0 to 6.4
13. area - the burned area of the forest (in ha): 0.00 to 1090.84
(this output variable is very skewed)
```

You can use any library available to you.

Grading

Your grading will depend on your models accuracy, precision and recall.

Submission

Compress all of your code in .zip or .tar.gz format and email the resulting archive to competitions.scs@ecaconcordia.ca with the subject line "MACHINE LEARNING - <insert team name here>"