extract_data1

May 18, 2025

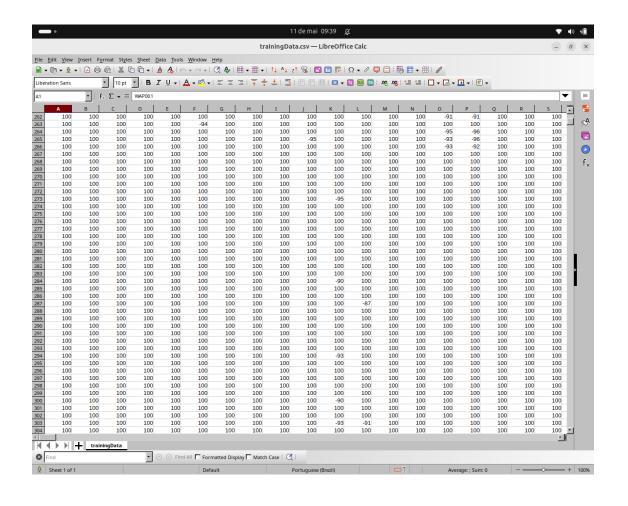
```
import pandas as pd
     import numpy as np
[3]: path_file1 = '/home/darkcover/Documentos/Gan/Data/Real/trainingData.csv'
     data1 = pd.read_csv(path_file1)
     data1.head()
[3]:
        WAP001
                 WAP002
                          WAP003
                                   WAPO04
                                            WAP005
                                                     WAP006
                                                              WAP007
                                                                       WAP008
                                                                                WAP009
                                                                                        \
     0
            100
                     100
                              100
                                      100
                                               100
                                                        100
                                                                 100
                                                                          100
                                                                                   100
     1
            100
                     100
                              100
                                      100
                                               100
                                                        100
                                                                 100
                                                                                   100
                                                                          100
     2
            100
                     100
                              100
                                      100
                                               100
                                                        100
                                                                 100
                                                                          -97
                                                                                   100
     3
            100
                                      100
                     100
                              100
                                               100
                                                        100
                                                                 100
                                                                          100
                                                                                   100
     4
            100
                     100
                              100
                                      100
                                               100
                                                        100
                                                                 100
                                                                          100
                                                                                   100
        WAPO10
                    WAP520 LONGITUDE
                                                         FLOOR
                                                                 BUILDINGID
                                                                              SPACEID
                                              LATITUDE
     0
            100
                        100 -7541.2643
                                          4.864921e+06
                                                              2
                                                                           1
                                                                                   106
            100
                                                              2
                                                                           1
     1
                        100 -7536.6212
                                          4.864934e+06
                                                                                   106
     2
            100
                                                              2
                                                                           1
                        100 -7519.1524
                                          4.864950e+06
                                                                                   103
     3
                                                              2
                                                                           1
            100
                        100 -7524.5704
                                          4.864934e+06
                                                                                   102
     4
                        100 -7632.1436
                                                                           0
            100
                                          4.864982e+06
                                                                                   122
        RELATIVEPOSITION
                            USERID
                                     PHONEID
                                                TIMESTAMP
     0
                         2
                                  2
                                           23
                                               1371713733
                         2
                                  2
     1
                                           23
                                               1371713691
     2
                         2
                                  2
                                           23
                                               1371714095
     3
                         2
                                  2
                                           23
                                               1371713807
                         2
     4
                                 11
                                           13
                                               1369909710
     [5 rows x 529 columns]
[4]:
    data1.describe()
[4]:
                   WAPO01
                                   WAPO02
                                             WAP003
                                                       WAP004
                                                                       WAP005
             19937.000000
                             19937.000000
                                            19937.0
                                                      19937.0
     count
                                                                19937.000000
     mean
                99.823644
                                99.820936
                                              100.0
                                                        100.0
                                                                   99.613733
                                                0.0
                                                           0.0
     std
                 5.866842
                                 5.798156
                                                                    8.615657
               -97.000000
                               -90.000000
                                              100.0
                                                        100.0
                                                                  -97.000000
     min
```

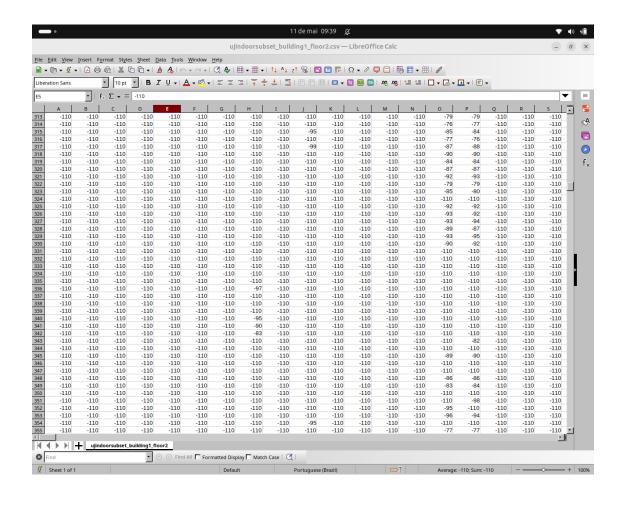
0.5%	100 000000	100 00000	100	. 0 . 1/	20 0 100 /	20000		
25%	100.000000					000000		
50%	100.000000					000000		
75%	100.000000					000000		
max	100.000000	100.00000	100	.0 10	00.0 100.0	000000		
	111000	114 D 0 0 0	-	IIA DOOO	IIA DO		٥ ١	
	WAP006			WAP008	WAPO(
count	19937.000000			.000000	19937.00000			
mean	97.130461			.820234	94.69393			
std	22.931890			.010404	30.30508			
min	-98.000000			.000000	-98.00000			
25%	100.000000			.000000	100.0000			
50%	100.000000	100.000000	100	.000000	100.00000	100.00000	0	
75%	100.000000	100.000000	100	.000000	100.00000	100.00000	0	
max	100.000000	100.000000	100	.000000	100.00000	100.00000	0	
	WAP520	LONGITUDE	LAT	ITUDE	FLOOR	BUILDINGID	\	
count	19937.0	19937.000000	1.99370	0e+04	19937.000000	19937.000000		
mean	100.0	-7464.275947	4.86487	1e+06	1.674575	1.212820		
std	0.0	123.402010	6.69331	8e+01	1.223078	0.833139		
min	100.0	-7691.338400	4.86474	6e+06	0.000000	0.000000		
25%	100.0	-7594.737000	4.86482	1e+06	1.000000	0.000000		
50%	100.0	-7423.060900	4.86485	2e+06	2.000000	1.000000		
75%	100.0	-7359.193000	4.86493	0e+06	3.000000	2.000000		
max		-7300.818990	4.86501		4.000000	2.000000		
	SPACEID RELATIVEPOSITION			USI	USERID PHONEID \			
count	19937.000000	19937.00	00000 1	9937.000	0000 19937.0	000000		
mean	148.429954	1.83	33024	9.068	3014 13.0	021869		
std	58.342106	0.37	72964	4.988	3720 5.3	362410		
min	1.000000	1.00	00000	1.000	0000 1.0	00000		
25%	110.000000	2.00	00000	5.000	0000 8.0	00000		
50%	129.000000	2.00	00000	11.000	0000 13.0	00000		
75%	207.000000	2.00	00000	13.000	0000 14.0	000000		
max	254.000000		00000	18.000		000000		
	TIMESTAMP							
count	1.993700e+04							
mean	1.371421e+09							
std	5.572054e+05							
min	1.369909e+09							
25%	1.371056e+09							
50%	1.371716e+09							
75%	1.371710e+09 1.371721e+09							
max	1.371738e+09							

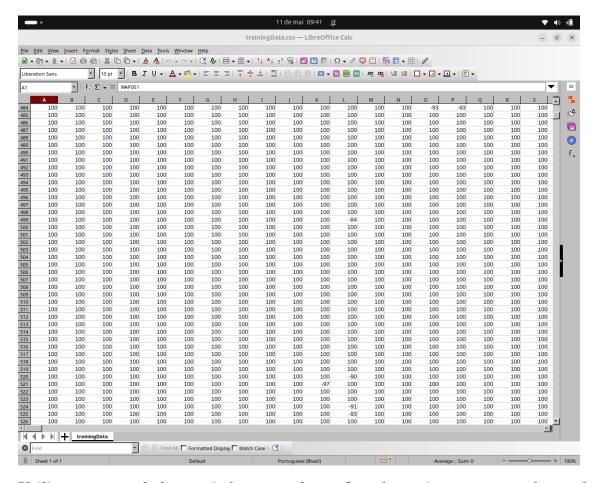
[8 rows x 529 columns]

```
[5]: data1.columns
[5]: Index(['WAP001', 'WAP002', 'WAP003', 'WAP004', 'WAP005', 'WAP006', 'WAP007',
            'WAP008', 'WAP009', 'WAP010',
            'WAP520', 'LONGITUDE', 'LATITUDE', 'FLOOR', 'BUILDINGID', 'SPACEID',
            'RELATIVEPOSITION', 'USERID', 'PHONEID', 'TIMESTAMP'],
           dtype='object', length=529)
[6]: data2 = data1[['LONGITUDE', 'LATITUDE', 'FLOOR', 'BUILDINGID']]
     data2.head()
[6]:
        LONGITUDE
                       LATITUDE FLOOR
                                        BUILDINGID
    0 -7541.2643 4.864921e+06
                                     2
                                                  1
     1 -7536.6212 4.864934e+06
                                     2
                                                  1
     2 -7519.1524 4.864950e+06
                                     2
                                                  1
     3 -7524.5704 4.864934e+06
                                     2
                                                  1
     4 -7632.1436 4.864982e+06
                                     0
                                                  0
[7]: data2.describe()
[7]:
               LONGITUDE
                              LATITUDE
                                                FLOOR
                                                         BUILDINGID
     count
            19937.000000
                          1.993700e+04
                                        19937.000000
                                                       19937.000000
    mean
            -7464.275947
                          4.864871e+06
                                             1.674575
                                                           1.212820
    std
              123.402010
                          6.693318e+01
                                             1.223078
                                                           0.833139
    min
            -7691.338400
                          4.864746e+06
                                            0.00000
                                                           0.000000
    25%
            -7594.737000
                          4.864821e+06
                                            1.000000
                                                           0.000000
     50%
            -7423.060900
                          4.864852e+06
                                                           1.000000
                                            2.000000
     75%
            -7359.193000 4.864930e+06
                                            3.000000
                                                           2.000000
            -7300.818990
                          4.865017e+06
    max
                                            4.000000
                                                           2.000000
```

A data possui entradas nas colunas com valor igual a 100







Utilizaremos os dados enviados como base, ficando o ajuste para mudança de valor. Podemos confirmar ?

```
[8]: # Carregar base
df = pd.read_csv(path_file1)

# Substituir valor ausente 100 por -110
rssi_columns = df.columns[:520]
df[rssi_columns] = df[rssi_columns].replace(100, -110)

# Filtro para prédio 1, andar 2
df_filtered = df[(df['BUILDINGID'] == 1) & (df['FLOOR'] == 2)].copy()

# Selecionar RSSI + coordenadas
X_rssi = df_filtered[rssi_columns].values
y_coords = df_filtered[['LONGITUDE', 'LATITUDE']].values

[9]: # Salvar RSSI + coordenadas do Building 1 - Floor 2
df_filtered.to_csv("/home/darkcover/Documentos/Gan/Data/
oujindoorsubset_building1_floor2.csv", index=False)
```