```
Python 3.7.7 (default, May  6 2020, 11:45:54) [MSC v.1916 64 bit (AMD64)]
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IPython 7.13.0 -- An enhanced Interactive Python.

In [1]:          'C:/Users/alvar/OneDrive/Escritorio/2do cuatrimestre/AA/práctica 3/
communities.py'      ='C:/Users/alvar/OneDrive/Escritorio/2do cuatrimestre/AA/práctica
3'
```

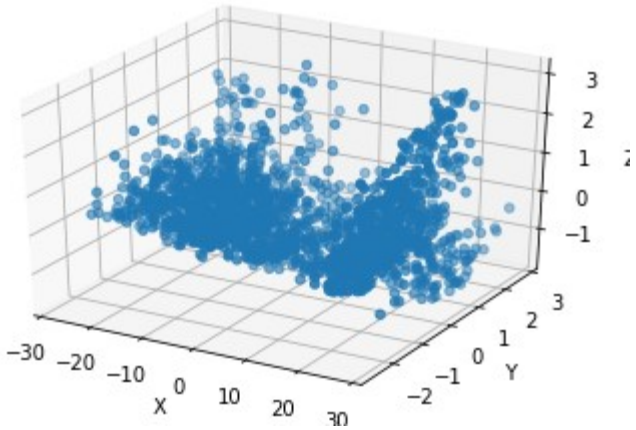


```
--- Pulsar tecla para continuar ---

Fitting 5 folds for each of 26 candidates, totalling 130 fits
[Parallel(n_jobs=-1)]: Using backend LokyBackend with 8 concurrent workers.
[Parallel(n_jobs=-1)]: Done  34 tasks      | elapsed:    7.9s
[Parallel(n_jobs=-1)]: Done 130 out of 130 | elapsed:   46.6s finished
CON PREPROCESADO:


 He estudiado estos modelos a los que asigno un índice:

                                               params param_poly__degree
0   {'estimator': SGDRegressor(alpha=0.0001, avera...                  1
1   {'estimator': SGDRegressor(alpha=0.0001, avera...                  2
2   {'estimator': SGDRegressor(alpha=0.0001, avera...                  1
3   {'estimator': SGDRegressor(alpha=0.0001, avera...                  2
4   {'estimator': SGDRegressor(alpha=0.0001, avera...                  1
5   {'estimator': SGDRegressor(alpha=0.0001, avera...                  2
6   {'estimator': SGDRegressor(alpha=0.0001, avera...                  1
7   {'estimator': SGDRegressor(alpha=0.0001, avera...                  2
8   {'estimator': SGDRegressor(alpha=0.0001, avera...                  1
9   {'estimator': SGDRegressor(alpha=0.0001, avera...                  2
10  {'estimator': SGDRegressor(alpha=0.0001, avera...                  1
11  {'estimator': SGDRegressor(alpha=0.0001, avera...                  2
12  {'estimator': LinearRegression(copy_X=True, fi...                  1
13  {'estimator': LinearRegression(copy_X=True, fi...                  2
14  {'estimator': Ridge(alpha=10000.0, copy_X=True...                  1
15  {'estimator': Ridge(alpha=10000.0, copy_X=True...                  2
16  {'estimator': Ridge(alpha=10000.0, copy_X=True...                  1
17  {'estimator': Ridge(alpha=10000.0, copy_X=True...                  2
18  {'estimator': Ridge(alpha=10000.0, copy_X=True...                  1
19  {'estimator': Ridge(alpha=10000.0, copy_X=True...                  2
20  {'estimator': Lasso(alpha=1.0, copy_X=True, fi...                  1
21  {'estimator': Lasso(alpha=1.0, copy_X=True, fi...                  2
22  {'estimator': Lasso(alpha=1.0, copy_X=True, fi...                  1
23  {'estimator': Lasso(alpha=1.0, copy_X=True, fi...                  2
24  {'estimator': Lasso(alpha=1.0, copy_X=True, fi...                  1
```

```
25  {'estimator': Lasso(alpha=1.0, copy_X=True, fi...                   2


--- Pulsar tecla para continuar ---

Resultados:

    rank_test_score  mean_fit_time  mean_test_score
0                 7       0.059642    -1.991183e-02
1                26       5.633138    -4.394008e+24
2                 6       0.063429    -1.985866e-02
3                25       2.212485    -1.812590e+24
4                17       0.039294    -5.390051e-02
5                19       1.223129    -5.394203e-02
6                 8       0.042084    -2.112625e-02
7                24       2.575714    -1.806207e+24
8                16       0.060640    -5.388674e-02
9                18       1.348798    -5.392042e-02
10               11       0.049865    -5.254287e-02
11               23       2.630373    -2.311991e+18
12                5       0.071612    -1.923194e-02
13               22      10.549404    -7.119231e-02
14                4       0.084978    -1.923192e-02
15               21       2.836411    -7.118933e-02
16                3       0.109903    -1.912210e-02
17               20       2.613811    -5.437140e-02
18                9       0.094947    -2.546633e-02
19                1       2.177779    -1.823903e-02
20                2       0.373000    -1.902407e-02
21               10      22.232722    -3.691741e-02
22               12       0.083379    -5.388487e-02
23               12       1.855838    -5.388487e-02
24               12       0.082177    -5.388487e-02
25               12       1.819735    -5.388487e-02


--- Pulsar tecla para continuar ---
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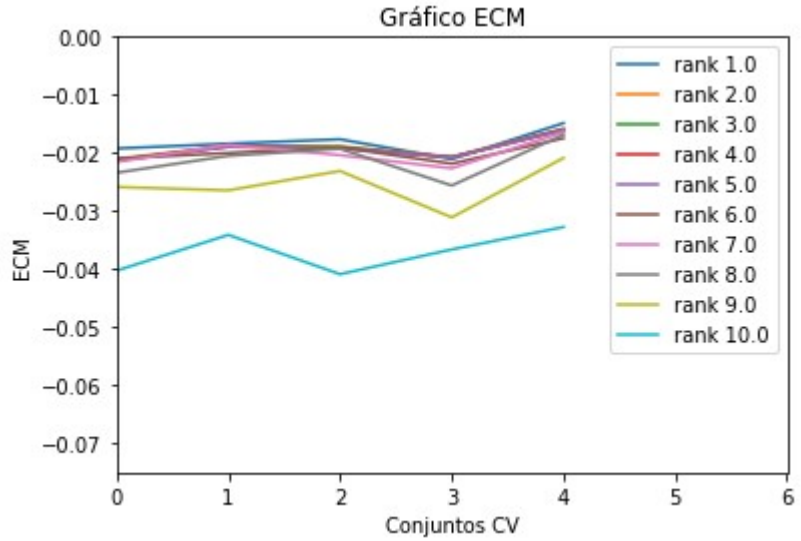


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--- Pulsar tecla para continuar ---

Mejor modelo:
 {'estimator': Ridge(alpha=10000.0, copy_X=True, fit_intercept=True, max_iter=None,
```

```
      normalize=False, random_state=None, solver='auto', tol=0.001), 'estimator__alpha':
10000.0, 'poly__degree': 2}
Error en training: 1.5851869296340082
Error en test:  1.7108687215650589
```

In [2]: