Cross_Validate_Search

Test 1 :

Poly :2 à 4

Gamma et Alpha: 0.1 à 1 (step of 0.1)

Résultat:

```
Set  0
bestW  [-0.14526555 -0.14526555 -0.14526555 -0.14526555  0.14302304
0.16658398
 -0.14526555  0.01919022 -0.66265613 -0.14526555 -0.00682256 -0.12060465
 -0.14526555 -0.04619443 -0.26854505 -0.14526555 -0.00682284 -0.12060495
 -0.14526555  0.42408973  0.15267577 -0.14526555 -0.34200832 -0.13782914
 -0.14526555 -0.07503385 -0.01331175 -0.14526555  0.48325103 -0.16683199
 -0.14526555  0.04058689 -0.01780975 -0.14526555 -0.01773919 -0.12911693
 -0.14526555  0.18004038 -0.26865787 -0.14526555  0.04508566 -0.17553439
 -0.14526555  0.0151609  -0.09603653 -0.14526555  0.17154488  0.24178848
 -0.14526555  0.0283974  -0.10461213 -0.14526555 -0.00823478 -0.15668107]
bestGamma  0.5
bestAlpha  0.5
bestDegree  2
Ratio: 94.63629402756509%


Set  1
bestW  [-0.079317   -0.079317   -0.079317   -0.079317    0.11677488
0.00608304
 -0.079317    0.03323589 -0.26166997 -0.079317   -0.0749151   0.02893454
 -0.079317   -0.03111449 -0.16121121 -0.079317    0.13082433  0.06180063
 -0.079317    0.2166594  -0.03985218 -0.079317   -0.14576645 -0.04505354
 -0.079317   -0.09421132 -0.00209528 -0.079317    0.30000334  0.03037206
 -0.079317    0.02762712 -0.05146138 -0.079317    0.02886805 -0.11230243
 -0.079317    0.09286483  0.02588108 -0.079317    0.01847112 -0.08175318
 -0.079317    0.01205196 -0.06087844 -0.079317    0.11331355  0.03129314
 -0.079317   -0.01109104 -0.05746698 -0.079317   -0.01972868 -0.05581636
 -0.079317    0.08228251 -0.05159735 -0.079317   -0.02025004  0.03684354
 -0.079317   -0.02061571 -0.03243027 -0.079317    0.0822826  -0.05159724]
bestGamma  0.1
bestAlpha  0.1
bestDegree  2
Ratio: 91.17724867724867%

Set  2
bestW  [-0.06526036 -0.06526036 -0.06526036 -0.06526036  0.08073688
0.06508496
 -0.06526036 -0.05101031 -0.92618776 -0.06526036 -0.16551231  0.16293444
 -0.06526036  0.12852901 -0.10820473 -0.06526036  0.26890657  0.90710466
 -0.06526036 -0.00405041  0.01977181 -0.06526036 -0.23057163 -0.50561028
 -0.06526036  0.91585964  0.19140416 -0.06526036  0.43346944 -0.34090047
 -0.06526036 -0.37039213 -0.23813427 -0.06526036 -0.24551859  0.27567726
 -0.06526036  0.23269457  0.37110907 -0.06526036  0.80539104  0.06056157
 -0.06526036 -0.00921537 -0.42364962 -0.06526036  0.00713556 -0.23405159
 -0.06526036  0.30464104  0.09149586 -0.06526036  0.01367257 -0.23270618
 -0.06526036 -0.08182683 -0.07133459 -0.06526036 -0.05623195  0.11651312
 -0.06526036 -0.05143587  0.08303223 -0.06526036 -0.69621876 -0.0276273
```

```
 -0.06526036  0.02774356 -0.22391995 -0.06526036 -0.19784256  0.15826279
 -0.06526036 -0.05577444 -0.16176239 -0.06526036  0.30308781 -0.06185247
 -0.06526036  0.0603926  -0.06577363 -0.06526036  0.29206139 -0.12050038
 -0.06526036  0.1275936  -0.19404542]
bestGamma  0.5
bestAlpha  0.1
bestDegree  2
Ratio: 90.27777777777777%

Set  3
bestW  [-0.26435583 -0.26435583 -0.26435583 -0.26435583  0.30943033 -
0.40132975
 -0.26435583 -0.25597436 -1.27925232 -0.26435583  0.05590195  0.29461215
 -0.26435583 -0.11983326  0.16875962 -0.26435583  0.1115596  -0.009905
 -0.26435583 -0.14528545 -0.05805912 -0.26435583 -0.15658557 -0.08768894
 -0.26435583  0.32856349 -0.1111829  -0.26435583  0.0642096   0.26132039
 -0.26435583 -0.19011208 -0.27502234 -0.26435583 -0.28144617 -0.21643977
 -0.26435583  0.11693913  0.18589037 -0.26435583  0.16949185  0.1377994
 -0.26435583 -0.49284852 -0.36564945 -0.26435583  0.13523902 -0.305024
 -0.26435583  0.32308737  0.1413936  -0.26435583 -0.06850949 -0.00681178
 -0.26435583 -0.37891152 -0.09167572 -0.26435583  0.0287239  -0.34343972
 -0.26435583  0.10107885 -0.23793448 -0.26435583 -0.457186    0.26262111
 -0.26435583  0.03266996 -0.37263466 -0.26435583 -0.08971664 -0.34713733
 -0.26435583 -0.05354753 -0.12312289 -0.26435583  0.0556508  -0.15615375
 -0.26435583 -0.06037024 -0.39380572 -0.26435583 -0.02505781 -0.1088424
 -0.26435583 -0.07317756 -0.88615565]
bestGamma  0.6
bestAlpha  0.1
bestDegree  2
Ratio: 93.08943089430893%

Set  4
bestW  [-0.02220702 -0.02220702 -0.02220702 -0.02220702 -0.47787745
0.10079395
 -0.02220702 -0.05455501 -0.3491103  -0.02220702 -0.07005964  0.06729159
 -0.02220702  0.42913035 -0.35949092 -0.02220702 -0.07005959  0.06729169
 -0.02220702  0.1983064  -0.05207411 -0.02220702 -0.44129686  0.07112309
 -0.02220702  0.00098036  0.04009628 -0.02220702  0.41282302 -0.02283691
 -0.02220702  0.00330699 -0.10101111 -0.02220702  0.00354647 -0.00864553
 -0.02220702 -0.10740618  0.03496943 -0.02220702  0.02230704 -0.21011447
 -0.02220702  0.00417427 -0.02022429 -0.02220702 -0.33998975  0.08816527
 -0.02220702 -0.03234727  0.00352862 -0.02220702  0.1237931  -0.00608006]
bestGamma  0.2
bestAlpha  0.8
bestDegree  2
Ratio: 79.70401691331924%

Set  5
bestW  [ 2.85635272e-03  2.85635272e-03  2.85635272e-03  2.85635272e-03
 -3.63831617e-01 -6.82291746e-02  2.85635272e-03  1.89748393e-01
 -3.67182458e-01  2.85635272e-03  9.97153883e-02  1.01679496e-01
  2.85635272e-03  3.25466273e-01 -4.10444802e-01  2.85635272e-03
  5.68396156e-02 -2.28148289e-04  2.85635272e-03  1.88345270e-01
 -1.15821789e-02  2.85635272e-03 -2.16522580e-01 -9.21892599e-03
  2.85635272e-03  2.65141457e-01  2.62010119e-02  2.85635272e-03
  3.23864064e-01 -3.45604043e-04  2.85635272e-03 -5.25431724e-03
 -1.13788807e-01  2.85635272e-03 -1.74488922e-02  4.02604988e-03
  2.85635272e-03  4.79144614e-02  2.52355089e-02  2.85635272e-03
 -5.27684719e-03 -1.73696912e-01  2.85635272e-03 -8.46705936e-03
  1.28926224e-02  2.85635272e-03  7.77839862e-02  2.29021135e-02
  2.85635272e-03  1.13560005e-02  4.35281444e-03  2.85635272e-03
```

```
  9.59292569e-02 -5.86911062e-02  2.85635272e-03  1.01546099e-01
  3.59043952e-02  2.85635272e-03 -4.18881469e-03  3.65020036e-01
  2.85635272e-03 -4.65237557e-03  6.02948147e-03  2.85635272e-03
  1.01546139e-01  3.59043613e-02]
bestGamma  0.1
bestAlpha  0.1
bestDegree  2
Ratio: 75.27579308373822%


Set  6
bestW  [ 0.0086983   0.0086983   0.0086983   0.0086983  -0.21213497 -
0.13890679
  0.0086983   0.36297524 -0.42417037  0.0086983   0.17924272  0.08013063
  0.0086983   0.15219336  0.13404015  0.0086983   0.15305692  0.1844012
  0.0086983  -0.14180692  0.04563558  0.0086983   0.33299976 -0.32931086
  0.0086983  -0.20484607  0.02614214  0.0086983   0.12394335 -0.02929927
  0.0086983  -0.15172332 -0.0490051   0.0086983   0.22973109 -0.02017212
  0.0086983   0.34207992  0.06995712  0.0086983   0.27820307 -0.00924392
  0.0086983  -0.00438665 -0.12922477  0.0086983  -0.00809025 -0.00285213
  0.0086983   0.10059097  0.04049733  0.0086983  -0.01376827 -0.15928919
  0.0086983   0.00972743  0.00291901  0.0086983   0.18421134  0.02965792
  0.0086983   0.01414874  0.00263641  0.0086983  -0.04858918 -0.06066321
  0.0086983  -0.00740606 -0.07728092  0.0086983   0.01795688  0.11245318
  0.0086983   0.01239495  0.01722527  0.0086983   0.10152001 -0.0355166
  0.0086983   0.01058107  0.10630885  0.0086983  -0.01272343 -0.00759297
  0.0086983   0.02730312 -0.05112907]
bestGamma  0.1
bestAlpha  0.30000000000000004
bestDegree  2
Ratio: 75.74224021592443%

Set  7
bestW  [-6.98662307e-02 -6.98662307e-02 -6.98662307e-02 -6.98662307e-02
 -1.26782455e+00 -9.40675679e-01 -6.98662307e-02  2.46282174e+00
 -2.60957185e+00 -6.98662307e-02  1.80841846e+00  7.68963873e-01
 -6.98662307e-02 -2.60419723e-01  1.52233300e+00 -6.98662307e-02
 -2.38707066e-01  1.32539827e+00 -6.98662307e-02 -2.14404182e-01
  9.84935310e-01 -6.98662307e-02  1.80654293e+00 -2.40964245e+00
 -6.98662307e-02 -5.10074310e-01 -1.08478524e-01 -6.98662307e-02
 -3.87907252e-02  3.95067958e-02 -6.98662307e-02 -1.04717636e+00
 -5.10731781e-01 -6.98662307e-02  1.49595649e+00 -2.53158499e-01
 -6.98662307e-02  1.06696356e+00  1.12729490e+00 -6.98662307e-02
  2.01992904e+00  2.52210752e-02 -6.98662307e-02 -1.82040030e-01
 -1.17603941e+00 -6.98662307e-02  1.50662120e-01 -6.89033492e-02
 -6.98662307e-02  7.81021458e-01  3.24616988e-01 -6.98662307e-02
 -1.44298090e-01 -1.34493727e+00 -6.98662307e-02  8.83277864e-02
 -1.13887317e-01 -6.98662307e-02  1.55067895e+00  3.73684769e-01
 -6.98662307e-02  1.36544916e-02 -1.89061988e-01 -6.98662307e-02
 -2.48597699e-01 -2.41949022e-03 -6.98662307e-02 -5.91146134e-01
 -5.60621815e-01 -6.98662307e-02  1.42022299e-02  1.20609221e-01
 -6.98662307e-02 -6.74607847e-02 -1.48892547e-01 -6.98662307e-02
 -2.53991104e-01 -5.64773048e-01 -6.98662307e-02  1.64946364e-01
  1.57242790e-02 -6.98662307e-02  7.38415772e-02 -2.12322965e-01
 -6.98662307e-02 -7.53392089e-01 -2.25766784e-01]
bestGamma  0.8
bestAlpha  0.30000000000000004
bestDelta  2
Ratio : 74.07658093212144%
```