

Plabo@fuguanjundeMBP > ~/Dropbox/ML/ML\_NTU/ML\_NTU\_HW/Hw3/18 > master ● python 18.py

X dimension before add 1 column: (1000, 20)

y dimension: (1000,)

X dimension: (1000, 21)

w dimension: (21,)

W: [ 0.01878417 -0.01260595 0.04084862 -0.03266317 0.01502334 -0.03667437  
0.01255933 0.04815065 -0.02206419 0.02479605 0.06899284 0.0193719  
-0.01988549 -0.0087049 0.04605863 0.05793382 0.061218 -0.04720391  
0.06070375 -0.01610907 -0.03484607]

Eout: 0.475

Plabo@fuguanjundeMBP > ~/Dropbox/ML/ML\_NTU/ML\_NTU\_HW/Hw3/19 > master ● python 19.py

X dimension before add 1 column: (1000, 20)

y dimension: (1000,)

X dimension: (1000, 21)

w dimension: (21,)

W: [-0.00385379 -0.18914564 0.26625908 -0.35356593 0.04088776 -0.3794296  
0.01982783 0.33391527 -0.26386754 0.13489328 0.4914191 0.08726107  
-0.25537728 -0.16291797 0.30073677 0.40014954 0.43218808 -0.46227967  
0.43230193 -0.20786372 -0.36936337]

Eout: 0.22

**X** Plabo@fuguanjundeMBP **~/Dropbox/ML/ML\_NTU/ML\_NTU\_HW/Hw3/20** **master** **python 20.py**

**X dimension before add 1 column: (1000, 20)**

**y dimension: (1000,)**

**X dimension: (1000, 21)**

**w dimension: (21,)**

**W: [ 0.01826899 -0.01308051 0.04072894 -0.03295698 0.01498363 -0.03691042**  
**0.01232818 0.04791334 -0.02244958 0.02470544 0.06878235 0.01897378**  
**-0.02032107 -0.00901469 0.04589259 0.05776824 0.06102487 -0.04756146**  
**0.06035018 -0.01660574 -0.03509342]**

**Eout: 0.473**





