



Errata: January 31, 2019

Thank you for purchasing [Machine Learning in Action](#). We'll update this list as necessary.

Unless otherwise noted, all corrections listed have been made or corrections are pending in all formats.

On page 16: (not in a code listing)

The line:

```
myEye = randMat*invRandMat
```

should appear above the line:

```
>>> myEye - eye(4)
```

Listing 2.2, bottom of page 25 thru page 26

This isn't an error, so no format has been updated.

A better version of the function `file2matrix()` is given below.

The code in the book will work.

```
def file2matrix(filename):  
    fr = open(filename)  
    arrayOLines = fr.readlines()  
    numberOfLines = len(arrayOLines)  
    returnMat = zeros((numberOfLines,3))  
    classLabelVector = []  
    index = 0  
    for line in arrayOLines:
```

```

line = line.strip()
listFromLine = line.split('\t')
returnMat[index,:] = listFromLine[0:3]
classLabelVector.append(int(listFromLine[-1]))
index += 1
return returnMat,classLabelVector

```

Page 26:

```

datingDataMat, datingLabels =
kNN.file2matrix('datingTestSet.txt')
should be:
datingDataMat, datingLabels =
kNN.file2matrix('datingTestSet2.txt')

```

```

>>> datingLabels[0:20]
['didntLike', 'smallDoses',...
should be:
>>> datingLabels[0:20]
[3, 2, 1, 1, 1, 1, 3, 3, 1, 3, 1, 1, 2, 1, 1, 1, 1, 2, 3]

```

Listing 2.5, page 32

```

datingDataMat, datingLabels =
file2matrix('datingTestSet.txt')
should be:
datingDataMat, datingLabels = file2matrix('datingTestSet2.txt')

```

Page 41 (not a code listing)

```

 $l(x_i) = \log_2 p(x_i)$ 
should be:
 $l(x_i) = -\log_2 p(x_i)$ 

```

Page 42: Listing 3.1

```

The line:
labelCounts[currentLabel] = 0

```

should be indented from the lines above and below it. The code in the repo is correct.

Listing 3.3, page 44

```
bestFeature = l  
should be:  
bestFeature = i
```

Page 52 (not a code listing)

```
>>> treePlotter.retrieveTree(1)  
should return:  
{'no surfacing': {0: 'no', 1: {'flippers': {0: {'head': {0: 'no', 1: 'yes'}}, 1: 'no'}}}}
```

Page 92

Before the line:

```
>>> reload(logRegres)
```

add the line:

```
>>> from numpy import *
```

At the beginning of the book I mention that this should be added to every interactive session, but it will be helpful for people to see this line here if they don't remember that.

Page 104 (not a code listing)

$$|wTx+b|/||w||$$

should be:

$$|wTA+b|/||w||$$

Listing 8.4, page 168

The line:

```
returnMat = zeros((numIt,n))
```

should be added before the line:

```
ws = zeros((n,1)); wsTest = ws.copy(); wsMax = ws.copy()
```

Listing 9.5, page 195

```
yHat = mat((m,1))
```

should be:

```
yHat = mat(zeros((m,1)))
```

Page 230, second paragraph:

You can't create a set of just one integer in Python. It needs to be a list (try it out).

should be:

The frozenset constructor requires something iterable and won't take a single integer. To accommodate this, we package each single integer in a list.
