



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 page26

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.
