The main question we try to answer on this page is:

statistical relationship between the features and the labels that can be represented by this data structure.

```python
import numpy as np
import matplotlib.pyplot as plt
from keras.models import Sequential
from keras.layers import Dense, Activation
from keras.optimizers import SGD

X= np.zeros([N, Dx])
Labels=np.zeros([N, Cy]) # neural network takes the indicators instead of Y

for i in range(N):
    X[i, :]=M[:, Y[i]]
    Labels[i, Y[i]]=1

X=X+ np.random.normal(0, .5, X.shape)
```
Navigate space