

Gibbs_RBM

April 20, 2017

```
In [40]: import numpy as np

d,m = 10,20

x = (np.random.rand(d,1) > 0.5)
h = (np.random.rand(m,1) > 0.5)
W = np.random.rand(d,m) - 0.5

max_iter = 10000
for i in range(max_iter):
    ph = 1 / (1 + np.exp(-(W.T @ x)))
    h = ph > 0.5
    px = 1 / (1 + np.exp(-(W @ h)))
    x = px > 0.5
```