

Example 1

January 25, 2017

```
In [1]: %matplotlib inline
import scipy.io.wavfile as wav
import matplotlib.pyplot as plt

rate, snd = wav.read("sndfile.wav")
plt.hist(snd/(2.0**15),50)

Out[1]: (array([ 4.00000000e+00,  2.00000000e+00,  2.00000000e+00,
 3.00000000e+00,  8.00000000e+00,  1.40000000e+01,
 1.30000000e+01,  1.20000000e+01,  1.60000000e+01,
 2.00000000e+01,  5.20000000e+01,  6.50000000e+01,
 6.10000000e+01,  9.40000000e+01,  1.52000000e+02,
 1.75000000e+02,  1.98000000e+02,  2.75000000e+02,
 3.70000000e+02,  2.88000000e+02,  3.29000000e+02,
 3.61000000e+02,  5.72000000e+02,  6.99000000e+02,
 9.59000000e+02,  9.90000000e+02,  1.32800000e+03,
 3.65800000e+03,  1.19990000e+04,  1.80810000e+04,
 1.16080000e+04,  3.56200000e+03,  1.53200000e+03,
 1.06900000e+03,  1.05700000e+03,  8.65000000e+02,
 7.29000000e+02,  5.04000000e+02,  4.26000000e+02,
 3.65000000e+02,  2.65000000e+02,  1.57000000e+02,
 1.42000000e+02,  8.90000000e+01,  8.70000000e+01,
 1.00000000e+02,  6.90000000e+01,  4.40000000e+01,
 1.40000000e+01,  4.00000000e+00]),
array([-0.05404663, -0.0522113 , -0.05037598, -0.04854065, -0.04670532,
 -0.04487   , -0.04303467, -0.04119934, -0.03936401, -0.03752869,
 -0.03569336, -0.03385803, -0.03202271, -0.03018738, -0.02835205,
 -0.02651672, -0.0246814 , -0.02284607, -0.02101074, -0.01917542,
 -0.01734009, -0.01550476, -0.01366943, -0.01183411, -0.00999878,
 -0.00816345, -0.00632812, -0.0044928 , -0.00265747, -0.00082214,
 0.00101318, 0.00284851, 0.00468384, 0.00651917, 0.00835449,
 0.01018982, 0.01202515, 0.01386047, 0.0156958 , 0.01753113,
 0.01936646, 0.02120178, 0.02303711, 0.02487244, 0.02670776,
 0.02854309, 0.03037842, 0.03221375, 0.03404907, 0.0358844 ,
 0.03771973]),
<a list of 50 Patch objects>)
```

