

Exercise 3 - Implement AUC

We came up with two different implementations for AUC. One is with a for loop, iterating over each point as a bias, and the other was using cumsum and taking a dot product. The non-loop implementation was of course faster, about 80% of the speed of the loop version.

Exercise 4 - Implement LLE

Exercise 5 - Application PCA

This was the most difficult of all the implementations.

No noise

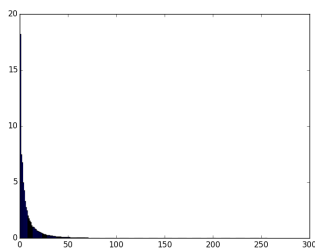


Figure 1: All PCs

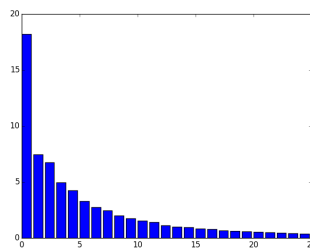


Figure 2: First 25 PCs



Figure 3: First 6 PCs

Exercise 3

a)

Please write in full sentences. Reference figures and tables in the text, e.g. Fig. 5 and Table 1.

Figure 4: Plot explanation. Please do not use the rainbow color map.