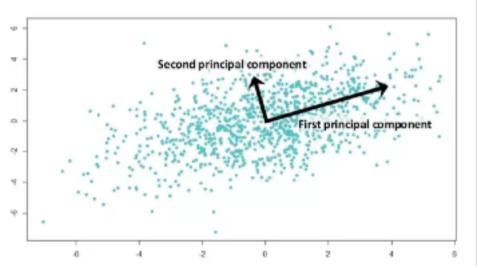
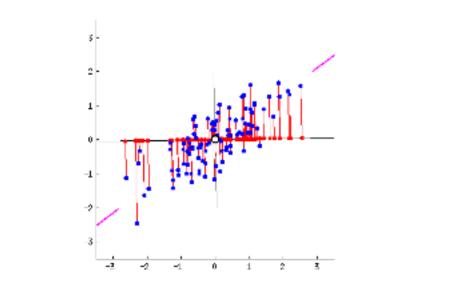
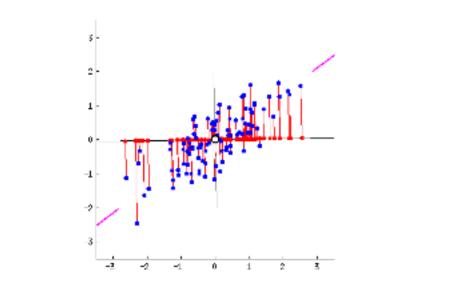
Principal component analysis PCA

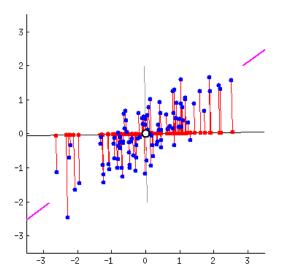
clusters

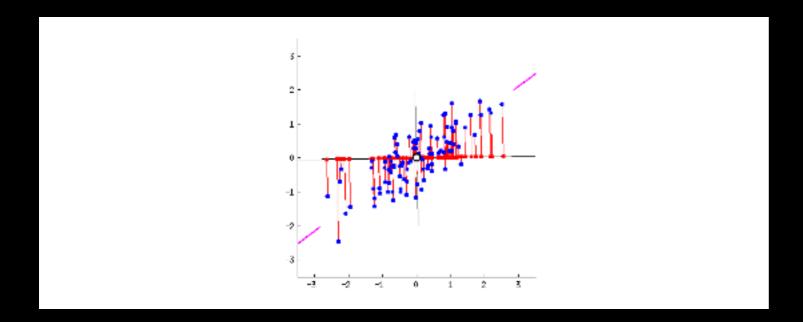
PCA

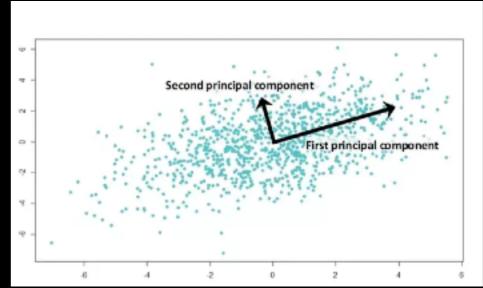












Principal component analysis (**PCA**) is a classic example of unsupervised machine learning that **clusters** data together.

PCA reduces a large number of variables to a small set that still contains most of the information from the larger group of variables.

In other words, it's a way to compress a lot of data, but still keeps the essence of the original large data.

Watch the video on the next slide on **PCAs** and pay close attention to how they reduce the number of dimensions.

