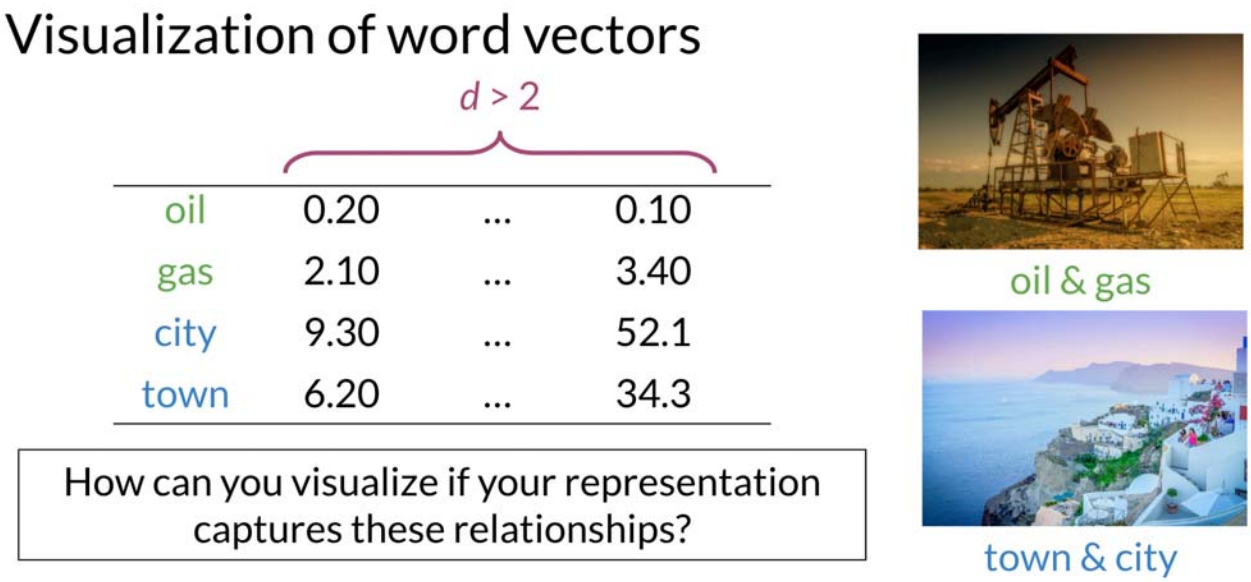
Visualization and PCA

Principal component analysis is an unsupervised learning algorithm which can be used to reduce the dimension of your data. As a result, it allows you to visualize your data. It tries to combine variances across features. Here is a concrete example of PCA:



Note that when doing PCA on this data, you will see that oil & gas are close to one another and town & city are also close to one another. To plot the data you can use PCA to go from $d > 2$ dimensions to $d = 2$.