

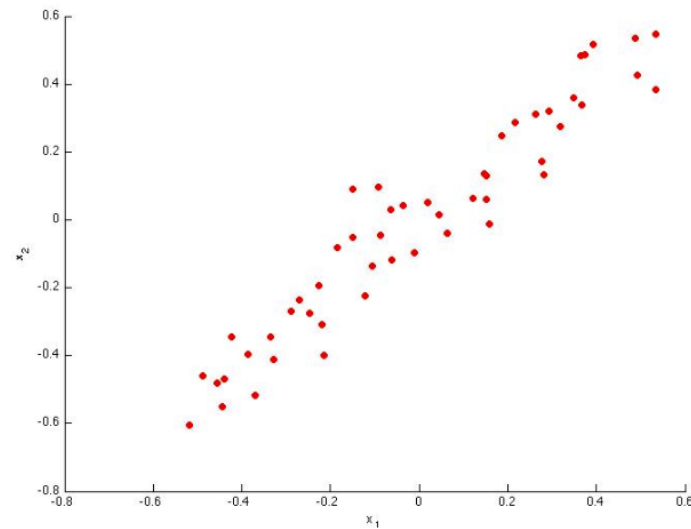
Principal Component Analysis

LATEST SUBMISSION GRADE

100%

1. Consider the following 2D dataset:

1 / 1 point



✓ Correct

The maximal variance is along the $y = x$ line, so the negative vector along that line is correct for the first principal component.



✓ Correct

This is correct, as it maintains the structure of the data while maximally reducing its dimension.

✓ If the input features are on very different scales, it is a good idea to perform feature scaling before applying PCA.

✓ Correct

If your learning algorithm is too slow because the input dimension is too high, then using PCA to speed it up is a reasonable choice.