1 PCA

The goal of PCA is to interpret the underlying structure of the data in terms of the principal components that are best at predicting the output variable.

Select an alternative

- ○ True
- ◉ False

The output of PCA is a subset of the original features in lower dimensions

Select an alternative

- ◉ True
- ○ False

The output of PCA is a new representation of the data that is always of lower dimensionality than the original feature representation.

Select an alternative

- ◉ True
- ○ False

Subsequent principal components are always orthogonal to each other

Select an alternative

- ◉ True
- ○ False

Assume we apply PCA to a matrix $X \in R^{n \times m}$ and obtain a set of PCA features, $Z \in R^{m \times n}$. We divide this set into two parts, Z_1 and Z_2. The first part, Z_1, corresponds to the top principal components. The second set, Z_2, corresponds to the remaining principal components. Is it common to expect a point with large feature values in Z_2 and small feature values in Z_1?

Select an alternative

- ○ True
- ◉ False

Nullstill

Maks poeng: 10