

Catatan Principal Component Analysis StatQuest

Principal Component Analysis (PCA) is a statistical technique that reduces the size of data while preserving important information. is introduced as a method to gain deeper insights into data by reducing its dimensionality while preserving important information. PCA is explained as a technique to reduce the dimensionality of data while retaining its essential features. PCA works by transforming data into lower-dimensional spaces, making it easier to analyze and understand patterns in the data.

PCA identifies correlation patterns between variables in a data set and represents those patterns as major components, called principal components. The main goal of PCA is to reduce data complexity while retaining as much relevant information as possible, enabling more efficient analysis and easier interpretation.

PCA uses the Singular Value Decomposition (SVD) technique to decompose data into independent primary components. method of PCA using Singular Value Decomposition (SVD) is emphasized as the approach to break down data into principal components.

PCA results can be used for a variety of purposes, including reducing data dimensions, grouping data, identifying patterns, and visualizing data more easily and easily understood.