Implementation of a Self Organizing Map

Damien DELPY

ENSEIRB-MATMECA

October 30, 2023

Overview

Algorithm

Bibliography

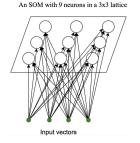
OVERWIEW

3/11

What is a SOM?

Definition

It is a neural network of just one layer: the output layer.



Wikipedia

A self-organizing map (SOM) is used to produce a low-dimensional (typically two-dimensional) representation of a higher dimensional data set, while preserving the topological structure of the data.

Similarities with a Perceptron

Motivation

Similarities with K-means algorithm

Convergence

ALGORITHM

BIBLIOGRAPHY

https://www.baeldung.com/cs/som-algorithm