Abstract

From Neural Gas, Bernd Fritzke introduce a slightly different approach that is called Growing Neural Gas (GNG). With its incremental feature, this algorithm has become a candidate algorithm for solving problems where there's only so little information about data.

This time, GNG is tested with a datasets that is designed for ilustrating problems in clustering. This datasets is created by Alfred Ultch and named Fundamental Clustering Problem Suite (FCPS). FCPS consist of ten datasets which represents certain problemsthat commonly arise in clustering.

The experiments show that this algorithm is able to solve almost every problems optimally. In some cases, a correct parameter value is highly needed. The reasons will be explained in this research.

Keywords*: clustering, Fundamental Clustering Problem Suite, Growing Neural Gas*