## CLUSTERING HIERARCHICAL DATA USING SOM NEURAL NETWORK

Lê Anh Tú, Nguyễn Quang Hoan, Lê Sơn Thái

## TÓM TẮT:

Abstract. This paper proposes a solution for clustering hierarchical data using SOM neural network. The training process that combines data-partition and network-partition allows forming an automated hierarchical tree structure

representing the clustering process more detailed from the root node to the leaf node. In which the root node and intermediate nodes act as the orientation for data distribution, and the leaf nodes represent real clusters of data. This training tree structure allows programming parallel processing to speed up network training. In addition, applying the trained network could be more efficient because the search process performed on the tree structure.