

## **An Intelligent Tool for Building E-Learning Content-Material Using Natural Language in Digital Libraries**

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*Abstract:* - In this paper is developed an intelligent searching tool using the Self-Organizing Map (SOM) algorithm, as a prototype e-content retrieval tool. The proposed searching tool has the ability to adjust and scale into any e-learning platform that requires concept-based queries. The SOM algorithm has been used successfully for the document organization as well as for document retrieval. In the proposed methodology, maps are used for the automatic replacement of the unstructured, the half structured and the multidimensional data of text in such a way that similar entries in the map are represented near between them. The performance and the functionality of the document organization and retrieval tool employing the SOM architecture, is presented. Furthermore, experiments performed to test the time performance of a learning algorithm used for the direct creation of teams of terms and texts enabling efficient searching and retrieval of the documents.