Deep Learning using Big Data

*Abstract*

This paper examines the relationship between big data and deep learning and shows how these technologies are currently being applied and their benefits. The effectiveness of deep learning algorithms on big data is studied and evaluated, especially in areas such as object recognition, text analysis, image processing and natural language processing. Using literature review and deep diving methods, this paper focuses on the methodologies and key findings of the reviewed papers. The results of this study show that deep learning and big data utilization play an important role in modern computing applications and offer great potential for future research.

1) Introduction

The aim of this study is to investigate deep learning methods using big data and to explore current applications of these technologies. The effectiveness of deep learning algorithms on big data will be examined and evaluated, especially in areas such as object recognition, text analysis, image processing and natural language processing.

(Big\_Data\_Deep\_Learning\_Challenges\_and\_Perspectives)

Deep learning has become an important tool in big data analytics and has come a long way in recent years. Thanks to its ability to learn complex patterns from large data sets and its high performance, deep learning provides a significant advantage over older methods in every sense. These challenges include determining the optimal number of model parameters, improving computational efficiency and processing large data sets. Besides these, deep learning models in big data analytics also exist with other big data challenges such as domain adaptation and streaming data. Therefore, further innovation and development on deep learning algorithms and architectures are needed to solve these problems.

(Deep learning applications and challenges in big data analytics)