

# **Artificial Intelligence's Contribution to Improving Big Data Analysis**

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**Abstract:** *In the field of data analysis, artificial intelligence has revolutionized the process by enabling the processing, analysis, and extraction of insightful information from large datasets. Organizations are generating more data than ever before, and conventional analytical tools are finding it difficult to keep up with the demands of the fast-paced business environment of today. Artificial intelligence advancements like neural networks and machine learning algorithms provide the means to overcome these challenges, improving operational effectiveness and decision-making across a variety of sectors. This article explores how AI improves data analysis by emphasizing implementation strategies, problem-solving techniques, real-world applications, and the wider effects on society and enterprises.*

**Keywords:** Machine Learning, Predictive Analytics, Real-time Data Processing