

# Chapter 17 Complexity Analysis of Machine Learning Algorithms

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## Abstract

In today's era of technical world, machine learning is the potential tool for performing different operations like classification, clustering and various mathematical operations. In this sequel there are various machine learning tools and techniques are available. As there are multiple machine learning algorithms are available, it becomes difficult to make choice of some specific algorithm suiting to problem specification at hand. To handle with this a complexity of different machine learning techniques is analyzed in this article.

## 4. Introduction

Machine learning algorithms plays vital role in vast range of applications in the fields like agriculture, space technology, medical, video processing and image processing etc. As various machine learning algorithms are proposed in the literature, the choice of best suitable is the issue. In this regard these algorithms should be analyzed for their time and space complexity. Further, the choice of machine learning algorithm is application dependent. For example, if the video surveillance system is installed for