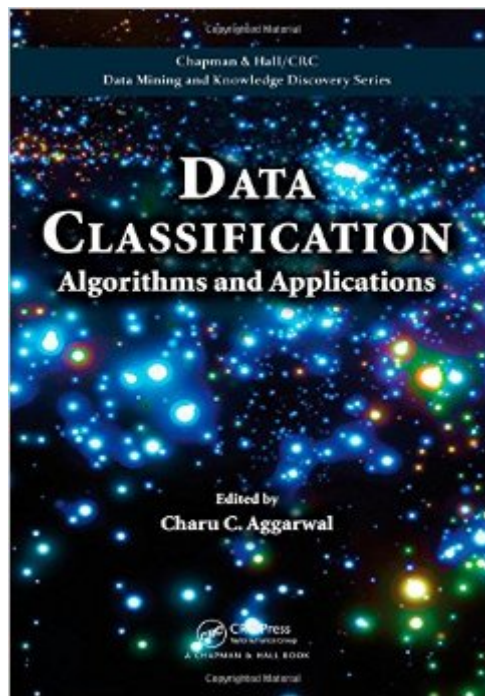# Data Classification: Algorithms And Applications (Chapman & Hall/CRC Data Mining And Knowledge Discovery Series)

Synopsis

Comprehensive Coverage of the Entire Area of ClassificationResearch on the problem of classification tends to be fragmented across such areas as pattern recognition, database, data mining, and machine learning. Addressing the work of these different communities in a unified way, Data Classification: Algorithms and Applications explores the underlying algorithms of classification as well as applications of classification in a variety of problem domains, including text, multimedia, social network, and biological data.This comprehensive book focuses on three primary aspects of data classification: Methods: The book first describes common techniques used for classification, including probabilistic methods, decision trees, rule-based methods, instance-based methods, support vector machine methods, and neural networks. Domains: The book then examines specific methods used for data domains such as multimedia, text, time-series, network, discrete sequence, and uncertain data. It also covers large data sets and data streams due to the recent importance of the big data paradigm. Variations: The book concludes with insight on variations of the classification process. It discusses ensembles, rare-class learning, distance function learning, active learning, visual learning, transfer learning, and semi-supervised learning as well as evaluation aspects of classifiers.

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