

<<数据降维和聚类中的若干问题研究>>

图书基本信息

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内容概要

A central research area in data mining and machine learning is probabilistic modeling because it has a number of advantages over non-probabilistic methods. Given a probabilistic model, one could fit the model using maximum likelihood (ML) method or Variational Bayesian (VB) method. In ML method, (1) many algorithms may converge very slowly and thus computationally efficient algorithms are often desirable; and (2) the choice of a suitable model is difficult though many model selection criteria exist and thus criteria with higher accuracy are desired. In VB method, employing different priors may yield different performances and thus studies on how to choose a suitable prior are important. In this book, three sub-topics were studied: Modeling, Estimation and Model selection for dimension reduction and clustering.

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