

<<模糊集合论及其应用>>

图书基本信息

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内容概要

《模糊集合论及其应用(第4版)》旨在为模糊理论方面的学者提供一部入门级教程，不仅满足了学生学习的需要，也很适合相关的专家学习深入研究。

为了使本书不仅仅是一部初级教程，读者范围更加广泛，增加了许多参考资料。

知识体系新颖，时代气息十足，不仅是对模糊理论的最现代解释，也很适合学习该理论的应用技巧。

虽然是模糊集合理论的初期阶段，该理论得到了广泛的发展，在人工智能，计算机科学，控制工程决策论，专家系统，逻辑学，广利科学，运筹学，机器人技术等众多领域中模糊技术都有广泛的应用，在理论研究方面也取得了突破性进展，作为第四版，有关概率论，模糊逻辑和近似推理，专家系统，模糊控制，模糊数据分析，决策理论和运筹学中模糊模型等章节都做了更新和扩展，并且包括了不少练习。

目次：模糊集导论；（第一部分）模糊数学：模糊集合，基本定义；扩展；模糊测度和模糊的测量；扩展原理及应用；模糊关系和模糊图；模糊分析；不确定模型；模糊集合理论应用；模糊集合和专家系统；模糊控制；模糊数据库和疑问；模糊数据分析；模糊环境中决策；工程和管理中模糊集合的应用；模糊集合理论中的经验研究；展望未来。

读者对象：数学专业研究生，计算机科学，人工智能，工程科学和相关科研人员。

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situation and is meant to be a mapping of a problem, a system, or a process. In contrast to a scientific theory, containing scientific laws as hypotheses, a model normally does not assert invariance with respect to time and space but requires modifications whenever the specific context for which the model was constructed changes. In the following, we will concentrate on models rather than on theories. Real-izing that there is quite a variety of types of models, we do not think that it is important and necessary for our purposes to distinguish models by their language (mathematics or logic is considered to be a modeling language) , by area, by problem type, by size, and so on. One classification, however, seems to be impor-tant: the distinction of models by their character. Scientific theories were already divided into formal theories and factual theories.

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