

<<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。

<<模糊集合论及其应用>>

书籍目录

- list of figures
- list of tables
- foreword
- preface
- preface to the fourth edition
- 1 introduction to fuzzy sets
 - 1.1 crispness, vagueness, fuzziness, uncertainty
 - 1.2 fuzzy set theory
- part i: fuzzy mathematics
- 2 fuzzy sets--basic definitions
 - 2.1 basic definitions
 - 2.2 basic set-theoretic operations for fuzzy sets
- 3 extensions
 - 3.1 types of fuzzy sets
 - 3.2 further operations on fuzzy sets
 - 3.2.1 algebraic operations
 - 3.2.2 set-theoretic operations
 - 3.2.3 criteria for selecting appropriate aggregation operators
- 4 fuzzy measures and measures of fuzziness
 - 4.1 fuzzy measures
 - 4.2 measures of fuzziness
- 5 the extension principle and applications
 - 5.1 the extension principle
 - 5.2 operations for type 2 fuzzy sets
 - 5.3 algebraic operations with fuzzy numbers
 - 5.3.1 special extended operations
 - 5.3.2 extended operations for \mathbb{R} -representation of fuzzy sets
- 6 fuzzy relations and fuzzy graphs
 - 6.1 fuzzy relations on sets and fuzzy sets
 - 6.1.1 compositions of fuzzy relations
 - 6.1.2 properties of the min-max composition
 - 6.2 fuzzy graphs
 - 6.3 special fuzzy relations
- 7 fuzzy analysis
 - 7.1 fuzzy functions on fuzzy sets
 - 7.2 extrema of fuzzy functions
 - 7.3 integration of fuzzy functions
 - 7.3.1 integration of a fuzzy function over a crisp interval
 - 7.3.2 integration of a (crisp) real-valued function over a fuzzy interval
 - 7.4 fuzzy differentiation
- 8 uncertainty modeling
 - 8.1 application-oriented modeling of uncertainty
 - 8.1.1 causes of uncertainty

<<模糊集合论及其应用>>

- 8.1.2 type of available information
- 8.1.3 uncertainty methods
- 8.1.4 uncertainty theories as transformers of information
- 8.1.5 matching uncertainty theory and uncertain phenomena
- 8.2 possibility theory
 - 8.2.1 fuzzy sets and possibility distributions
 - 8.2.2 possibility and necessity measures
- 8.3 probability of fuzzy events
 - 8.3.1 probability of a fuzzy event as a scalar
 - 8.3.2 probability of a fuzzy event as a fuzzy set
- 8.4 possibility vs. probability
- part ii: applications of fuzzy set theory
- 9 fuzzy logic and approximate reasoning
 - 9.1 linguistic variables
 - 9.2 fuzzy logic
 - 9.2.1 classical logics revisited
 - 9.2.2 linguistic truth tables
 - 9.3 approximate and plausible reasoning
 - 9.4 fuzzy languages
 - 9.5 support logic programming and fril
 - 9.5.1 introduction
 - 9.5.2 fril rules
 - 9.5.3 inference methods in fril
 - 9.5.4 fril inference for a single rule
 - 9.5.5 multiple rule case
 - 9.5.6 interval and point semantic unification
 - 9.5.7 least prejudiced distribution and learning
 - 9.5.8 applications of fril
- 10 fuzzy sets and expert systems
 - 10.1 introduction to expert systems
 - 10.2 uncertainty modeling in expert systems
 - 10.3 applications
- 11 fuzzy control
 - 11.1 origin and objective
 - 11.2 automatic control
 - 11.3 the fuzzy controller
 - 11.4 types of fuzzy controllers
 - 11.4.1 the mamdani controller
 - 11.4.2 defuzzification
 - 11.4.3 the sugeno controller
 - 11.5 design parameters
 - 11.5.1 scaling factors
 - 11.5.2 fuzzy sets
 - 11.5.3 rules
 - 11.6 adaptive fuzzy control
 - 11.7 applications
 - 11.7.1 crane control

<<模糊集合论及其应用>>

- 11.7.2 control of a model car
- 11.7.3 control of a diesel engine
- 11.7.4 fuzzy control of a cement kiln
- 11.8 tools
- 11.9 stability
- 11.10 extensions
- 12 fuzzy data bases and queries
- 12.1 introduction
- 12.2 fuzzy relational databases
- 12.3 fuzzy queries in crisp databases
- 13 fuzzy data analysis
- 13.1 introduction
- 13.2 methods for fuzzy data analysis
- 13.2.1 algorithmic approaches
- 13.2.2 knowledge-based approaches
- 13.2.3 neural net approaches
- 13.3 dynamic fuzzy data analysis
- 13.3.1 problem description
- 13.3.2 similarity of functions
- 13.3.3 approaches for analysis dynamic systems
- 13.4 tools for fuzzy data analysis
- 13.4.1 requirements for fda tools
- 13.4.2 data engine
- 13.5 applications of fda
- 13.5.1 maintenance management in petrochemical plants
- 13.5.2 acoustic quality control
- 14 decision making in fuzzy environments
- 14.1 fuzzy decisions
- 14.2 fuzzy linear programming
- 14.2.1 symmetric fuzzy lp
- 14.2.2 fuzzy lp with crisp objective function
- 14.3 fuzzy dynamic programming
- 14.3.1 fuzzy dynamic programming with crisp state transformation function
- 14.4 fuzzy multicriteria analysis
- 14.4.1 multi objective decision making (modm)
- 14.4.2 multi attributive decision making (madm)
- 15 applications of fuzzy sets in engineering and management
- 15.1 introduction
- 15.2 engineering applications
- 15.2.1 linguistic evaluation and ranking of machine tools
- 15.2.2 fault detection in gearboxes
- 15.3 applications in management
- 15.3.1 a discrete location model
- 15.3.2 fuzzy set models in logistics
- 15.3.2.1 fuzzy approach to the transportation problem
- 15.3.2.2 fuzzy linear programming in logistics

<<模糊集合论及其应用>>

- 15.3.3 fuzzy sets in scheduling
 - 15.3.3.1 job-shop scheduling with expert systems
 - 15.3.3.2 a method to control flexible manufacturing systems
 - 15.3.3.3 aggregate production and inventory planning
 - 15.3.3.4 fuzzy mathematical programming for maintenance scheduling
 - 15.3.3.5 scheduling courses, instructors, and classrooms
- 15.3.4 fuzzy set models in inventory control
- 15.3.5 fuzzy sets in marketing
 - 15.3.5.1 customer segmentation in banking and finance
 - 15.3.5.2 bank customer segmentation based on customer behavior
- 16 empirical research in fuzzy set theory
 - 16.1 formal theories vs. factual theories vs. decision technologies
 - 16.1.1 models in operations research and management science
 - 16.1.2 testing factual models
 - 16.2 empirical research on membership functions
 - 16.2.1 type a-membership model
 - 16.2.2 type b-membership model
 - 16.3 empirical research on aggregators
 - 16.4 conclusions
- 17 future perspectives
- abbreviations of frequently cited journals
- bibliography
- index

章节摘录

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.

<<模糊集合论及其应用>>

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