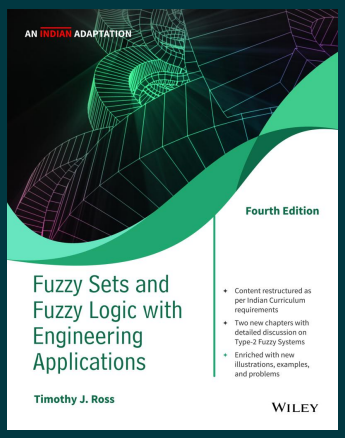
WILEY



Fuzzy Sets and Fuzzy Logic with Engineering Applications, 4ed, An Indian Adaptation

By Timothy J. Ross

Paperback 9788126502608 ₹1,199.00

Description

This Indian adaptation features new illustrations and examples throughout the book. This will benefit student learning in all basic operations, the generation of membership functions, conversion to crisp quantities, decision-making techniques and specialized applications in the latter chapters of the book, providing an invaluable tool for students as well as for self-study by practicing engineers. Each chapter now includes some new examples and end-of-chapter problems.

About the Author

Timothy J. Ross

Timothy J. Ross is Professor and Regents' Lecturer of Civil Engineering at the University of New Mexico. He received his PhD in Civil Engineering from Stanford University, his MS from Rice University, and his BS from Washington State University. Professor Ross has held previous positions as Senior Research Structural Engineer, Air Force Weapons Laboratory, from 1978 to 1986; and Vulnerability Engineer, Defense Intelligence Agency, from 1973 to 1978. Professor Ross has authored more than 150 publications and has been active in the research and teaching of fuzzy logic since 1983.

Table of Contents

1 Introduction

- The Case for Imprecision
- A Historical Perspective
- The Utility of Fuzzy Systems
- Limitations of Fuzzy Systems
- The Illusion: Ignoring Uncertainty and Accuracy
- Uncertainty and Information
- Fuzzy Sets and Membership
- Chance Versus Fuzziness
- Intuition of Uncertainty: Fuzzy Versus Probability
- Sets as Points in Hypercubes
- Applications of Fuzzy Logic with Examples
- Contrast Between Conventional Ai/Expert Systems and Fuzzy-Based Systems

2 Classical Sets and Fuzzy Sets

- Classical Sets

- Fuzzy Sets

3 Classical Relations and Fuzzy Relations

- Cartesian Product
- Crisp Relations
- Fuzzy Relations
- Tolerance and Equivalence Relations
- Fuzzy Tolerance and Equivalence Relations
- Value Assignments
- Other Forms of the Composition Operation

4 Properties of Membership Functions, Fuzzification, Membership Value Assignments

---

To purchase this product, please visit:
https://www.wileyindia.com/fuzzy-sets-and-fuzzy-logic-with-engineering-applications-4ed-an-indian-adaptation.html

Scan to buy