Recent Literature
Collected by
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1. Basic concepts

1.3. Fuzzy set-theoretic operators


1.4. Measures of information and comparison


1.5. Fuzzy relations

1.5.1. Similarities and fuzzy partial orderings


1.5.2. Equation solving


1.7. Fuzzy numbers and intervals

1.7.1. Mathematical aspects


1.7.3. Ranking fuzzy intervals


2. Applications to pure and applied mathematics

2.1. Non-classical logics


2.3. Algebras

2.3.1. Alternative algebras


2.3.2. Fuzzy subsets of algebraic structures


2.5. Generalized measure theory

2.5.1. Nonadditive measures and integrals


2.5.3. Fuzzy random variables


2.6. Analysis

2.6.1. Fixed points theorems


2.6.3. Fuzzy differential equations


2.7. Formal languages and automata


3. Methodology

3.1. Artificial intelligence

3.1.1. Theory of approximate reasoning


3.1.2. Fuzzy rule-based inference systems


3.1.3. Diagnosis and abduction

3.1.4. Computational linguistics and knowledge representation

3.1.6. Knowledge acquisition and validation

3.1.9. Learning
3.1.9.1. Neural networks

3.1.9.2. Genetic algorithms

3.1.9.3. Decision trees

3.1.9.6. Support vector machines


3.2. Information processing
3.2.2. Information retrieval

3.2.3. Ontologies and the Web semantics


3.2.6. Computer-aided design

3.2.8. Data mining


3.3. Pattern analysis and classification

3.3.1. Pattern recognition and classification


3.3.2. Clustering


3.3.3. Image processing and computer vision


3.3.4. Speech recognition

3.3.5. Signal processing


3.4. System science

3.4.1. Fuzzy models of systems


3.4.2. Fuzzy control
3.4.2.1. Theory of fuzzy control

3.4.2.2. Analysis of fuzzy controllers

3.4.2.3. Adaptive fuzzy controllers

3.4.2.4. Design

3.4.2.7. Tracking

3.4.3. Universal approximation results

3.4.4. Queuing systems

3.4.5. Discrete-event systems

3.5. Decision making
3.5.2. Multiple criteria evaluation
J.J. Huang, G.H. Tzeng, C.S. Ong, Optimal fuzzy multi-criteria expansion of competence sets using

3.5.3. Group decision making

3.5.5. Risk analysis

3.6. Optimization
3.6.1. Fuzzy linear programming

3.6.2. Nonlinear programming

3.6.3. Multiple criteria optimization

3.6.4. Combinatorial optimization

3.6.5. Graph problems

3.7. Statistics and data analysis
3.7.3. Regression analysis

3.8. Reliability
3.10. Hardware


4. Applications

4.1. Engineering

4.1.1. Process engineering


4.1.2. Fault detection and diagnosis


4.1.3. Production research


4.1.4. Robotics and mechanical engineering


4.1.5. Management of large scale systems


4.1.6. Civil engineering and earth sciences


4.1.8. Transportation


4.1.10. Agricultural and environmental engineering


4.1.12. Telecommunications and computer networks


4.1.13. Electrical engineering


4.2. Medicine


4.3. Economics

4.3.1. Models

4.3.2. Finance and marketing science

4.3.3. Electronic commerce