

## Design of Intelligent Systems Based on Fuzzy Logic, Neural Networks and Nature-Inspired Optimization [

Melin, Patricia,
ed. lit
Castillo, Óscar,
ed. lit
Kacprzyk, Janusz,
ed. lit
Springer International Publishing,
2015

Engineering Artificial intelligence Mathematical optimization
Computational Intelligence Artificial Intelligence Optimization
Robotics, Mechatronics

Monografía

This book presents recent advances on the design of intelligent systems based on fuzzy logic, neural networks and nature-inspired optimization and their application in areas such as, intelligent control and robotics, pattern recognition, time series prediction and optimization of complex problems. The book is organized in eight main parts, which contain a group of papers around a similar subject. The first part consists of papers with the main theme of theoretical aspects of fuzzy logic, which basically consists of papers that propose new concepts and algorithms based on fuzzy systems. The second part contains papers with the main theme of neural networks theory, which are basically papers dealing with new concepts and algorithms in neural networks. The third part contains papers describing applications of neural networks in diverse areas, such as time series prediction and pattern recognition. The fourth part contains papers describing new nature-inspired optimization algorithms. The sixth part contains papers describing new optimization algorithms. The seventh part contains papers describing applications of fuzzy logic in diverse areas, such as time series prediction and pattern recognition. Finally, the eighth part contains papers that present enhancements to meta-heuristics based on fuzzy logic techniques

https://rebiunoda.pro.baratznet.cloud: 28443/Opac Discovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMjl4MDMwOTE-pomNlbGVicmF0aW9uOmVzLmJhcmF0aW9uOmvzLmJhcmF0aW9uOm

**Título:** Design of Intelligent Systems Based on Fuzzy Logic, Neural Networks and Nature-Inspired Optimization Recurso electrónico] edited by Patricia Melin, Oscar Castillo, Janusz Kacprzyk

Editorial: Cham Springer International Publishing Imprint: Springer 2015

Editorial: Cham Springer International Publishing 2015

Descripción física: XII, 637 p. 307 il., 226 il. col

Mención de serie: Studies in Computational Intelligence 601

Nota general: Bibliographic Level Mode of Issuance: Monograph

Contenido: Part I Fuzzy Logic Theory -- Part II Neural Networks Theory -- Part III Neural Networks Applications

-- Part IV Nature Inspired Optimization -- Part V Nature Inspired Optimization Applications -- Part VI Optimization: Theory and Applications -- Part VII Fuzzy Logic Applications -- Part VIII Fuzzy Logic and

Metaheuristic

Lengua: English

ISBN: 9783319177472 9783319177465 9783319177489 9783319369617

Materia: Engineering Artificial intelligence Mathematical optimization Computational Intelligence Artificial

Intelligence Optimization Control, Robotics, Mechatronics

Autores: Melin, Patricia, ed. lit Castillo, Óscar, ed. lit Kacprzyk, Janusz, ed. lit

Enlace a formato físico adicional: 3-319-17746-X

Punto acceso adicional serie-Título: Studies in Computational Intelligence 601

## **Baratz Innovación Documental**

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es