Emerging Capabilities and Applications of Artificial Higher Order Neural Networks
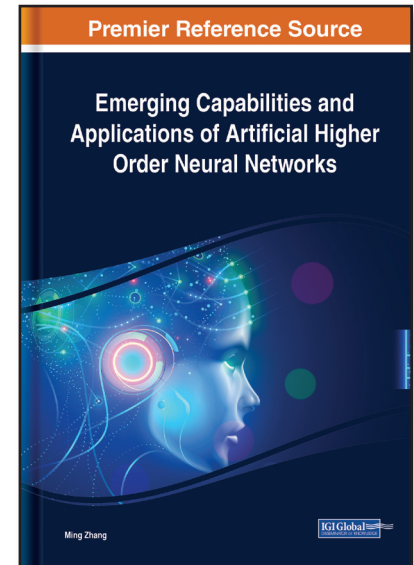
Part of the Advances in Computational Intelligence and Robotics Book Series

Ming Zhang (Christopher Newport University, USA)

Premier Reference Source

Emerging Capabilities and Applications of Artificial Higher Order Neural Networks

Ming Zhang

IGI Global

Description:

Artificial neural network research is one of the new directions for new generation computers. Current research suggests that open box artificial higher order neural networks (HONNs) play an important role in this new direction. HONNs will challenge traditional artificial neural network products and change the research methodology that people are currently using in control and recognition areas for the control signal generating, pattern recognition, nonlinear recognition, classification, and prediction. Since HONNs are open box models, they can be easily accepted and used by individuals working in information science, information technology, management, economics, and business fields.

Emerging Capabilities and Applications of Artificial Higher Order Neural Networks contains innovative research on how to use HONNs in control and recognition areas and explains why HONNs can approximate any nonlinear data to any degree of accuracy, their ease of use, and how they can have better nonlinear data recognition accuracy than SAS nonlinear procedures. Featuring coverage on a broad range of topics such as nonlinear regression, pattern recognition, and data prediction, this book is ideally designed for data analysists, IT specialists, engineers, researchers, academics, students, and professionals working in the fields of economics, business, modeling, simulation, control, recognition, computer science, and engineering research.

ISBN: 9781799835639	**Pages:** 346	**Copyright:** 2020	**Release Date:** March, 2020
Hardcover: $225.00	**Softcover:** $170.00	**E-Book:** $225.00	**Hardcover + E-Book:** $270.00

Topics Covered:

- Artificial Intelligence
- Data Analysis
- Data Prediction
- Facial Recognition
- Financial Data
- GAT Tree Model
- Group Models
- Machine Learning
- Nonlinear Regression
- Pattern Recognition

Subject: Computer Science and Information Technology

Classification: Authored Reference

Readership Level: Advanced-Academic Level (Research Recommended)

Research Suitable for: Advanced Undergraduate Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

IGI Global
DISSEMINATOR OF KNOWLEDGE