

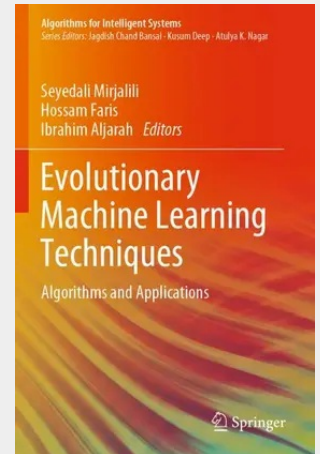
Evolutionary Machine Learning Techniques

Algorithms and Applications

This book provides an in-depth analysis of the current evolutionary machine learning techniques. Discussing the most highly regarded methods for classification, clustering, regression, and prediction, it includes techniques such as support vector machines, extreme learning machines, evolutionary feature selection, artificial neural networks including feed-forward neural networks, multi-layer perceptron, probabilistic neural networks, self-optimizing neural networks, radial basis function networks, recurrent neural networks, spiking neural networks, neuro-fuzzy networks, modular neural networks, physical neural networks, and deep neural networks.

The book provides essential definitions, literature reviews, and the training algorithms for machine learning using classical and modern nature-inspired techniques. It also investigates the pros and cons of classical training algorithms. It features a range of proven and recent nature-inspired algorithms used to train different types of artificial neural networks, including genetic algorithm, ant colony optimization, particle swarm optimization, grey wolf optimizer, whale optimization algorithm, ant lion optimizer, moth flame algorithm, dragonfly algorithm, salp swarm algorithm, multi-verse optimizer, and sine cosine algorithm. The book also covers applications of the improved artificial neural networks to solve classification, clustering, prediction and regression problems in diverse fields.

This book provides an in-depth analysis of the current evolutionary machine learning techniques. Discussing the most highly regarded methods for classification, clustering, regression, and prediction, it includes techniques such as support vector machines, extreme learning machines, evolutionary feature selection, artificial neural networks including feed-forward neural networks, multi-layer perceptron, probabilistic neural networks, self-optimizing neural networks, radial basis function networks, recurrent neural networks, spiking neural networks, neuro-fuzzy networks, modular neural networks, physical neural networks, and deep neural networks. The book provides essential definitions, literature reviews, and the training algorithms for machine learning using classical and modern nature-inspired techniques. It also investigates the pros and cons of classical training algorithms. It features a range of proven and recent nature-inspired algorithms used to train different types of artificial neural networks, including genetic algorithm, ant colony optimization, particle swarm optimization, grey wolf optimizer, whale optimization algorithm, ant lion optimizer, moth flame algorithm, dragonfly algorithm, salp swarm algorithm, multi-verse optimizer, and sine cosine algorithm. The book also covers applications of the improved artificial neural networks to solve classification, clustering, prediction and regression problems in diverse fields.



192,59 €

179,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9789813299924

Medium: Buch

ISBN: 978-981-329-992-4

Verlag: Springer

Erscheinungstermin: 25.11.2020

Sprache(n): Englisch

Auflage: 1. Auflage 2020

Serie: Algorithms for Intelligent Systems

Produktform: Kartoniert

Gewicht: 452 g

Seiten: 286

Format (B x H): 155 x 235 mm

