

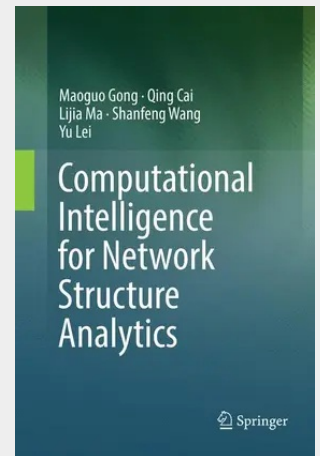
Computational Intelligence for Network Structure Analytics

This book presents the latest research advances in complex network structure analytics based on computational intelligence (CI) approaches, particularly evolutionary optimization. Most if not all network issues are actually optimization problems, which are mostly NP-hard and challenge conventional optimization techniques. To effectively and efficiently solve these hard optimization problems, CI based network structure analytics offer significant advantages over conventional network analytics techniques. Meanwhile, using CI techniques may facilitate smart decision making by providing multiple options to choose from, while conventional methods can only offer a decision maker a single suggestion. In addition, CI based network structure analytics can greatly facilitate network modeling and analysis. And employing CI techniques to resolve network issues is likely to inspire other fields of study such as recommender systems, system biology, etc., which will in turn expand CI's scope and applications.

As a comprehensive text, the book covers a range of key topics, including network community discovery, evolutionary optimization, network structure balance analytics, network robustness analytics, community-based personalized recommendation, influence maximization, and biological network alignment.

Offering a rich blend of theory and practice, the book is suitable for students, researchers and practitioners interested in network analytics and computational intelligence, both as a textbook and as a reference work.

This book presents the latest research advances in complex network structure analytics based on computational intelligence (CI) approaches, particularly evolutionary optimization. Most if not all network issues are actually optimization problems, which are mostly NP-hard and challenge conventional optimization techniques. To effectively and efficiently solve these hard optimization problems, CI based network structure analytics offer significant advantages over conventional network analytics techniques. Meanwhile, using CI techniques may facilitate smart decision making by providing multiple options to choose from, while conventional methods can only offer a decision maker a single suggestion. In addition, CI based network structure analytics can greatly facilitate network modeling and analysis. And employing CI techniques to resolve network issues is likely to inspire other fields of study such as recommender systems, system biology, etc., which will in turn expand CI's scope and applications. As a comprehensive text, the book covers a range of key topics, including network community discovery, evolutionary optimization, network structure balance analytics, network robustness analytics, community-based personalized recommendation, influence maximization, and biological network alignment. Offering a rich blend of theory and practice, the book is suitable for students, researchers and practitioners interested in network analytics and computational intelligence, both as a textbook and as a reference work.



106,99 €

99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9789811351679

Medium: Buch

ISBN: 978-981-13-5167-9

Verlag: Springer Nature Singapore

Erscheinungstermin: 12.12.2018

Sprache(n): Englisch

Auflage: Softcover Nachdruck of the original 1. Auflage 2017

Produktform: Kartoniert

Gewicht: 452 g

Seiten: 283

Format (B x H): 155 x 235 mm

