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Graph Theory for Operations Research and Management: Applications in Industrial Engineering

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Graph Theory for Operations Research and Management

Applications in Industrial Engineering



Reza Zanjirani Farahani & Elnaz Miandoabchi

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Reza Zanjirani Farahani (Kingston University London, UK) and Elnaz Miandoabch (Institute for Trade Studies & Research, Iran)

While typically many approaches have been mainly mathematics focused, graph theory has become a tool used by scientists, researchers, and engineers in using modeling techniques to solve real-world problems.

Graph Theory for Operations Research and Management: Applications in Industrial Engineering presents traditional and contemporary applications of graph theory in the areas of industrial engineering, management science, and applied operations research. This comprehensive collection of research introduces the useful basic concepts of graph theory in real world applications.

Topics Covered:

- · Applying Graph Theory
- Basics of Graph Theory
- Connectivity
- External Graphs and Ramsey Theory
- Higher Education Management
- · Matching Theory
- Networks

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Reza Zanjirani Farahani graduated with a PhD in Industrial Engineering from Sharif University of Technology. Dr. Farahani has around 12 years experience in academia and business including at National University of Singapore (2 years as Research Fellow A), Sharif University of Technology, (4.5 years as teaching fellow) and Amirkabir University of Technology (5.5. years as assistant Prof. and associate Prof.). Farahani is currently working as Senior Lecturer at Kingston Business School. Over recent years he has published many journal papers mostly published in top tier journals like European Journal of Operational Research, Journal of Operational Research Society, Computers & Operations Research, International Journal of Production Research, International Journal of Production Economics, Computers Industrial Engineering, and Annals of Operations Research in various areas of operations management like supply chain management and outbound logistics, inbound logistics, operations management, transportation planning, facilities planning, facilities planning, facilities location, and facilities design using traditional and modern operations research techniques. Moreover, he has several published and accepted books and book chapters with leading publishers like Springer-Verlag, Elsevier, and IGI Global. Dr. Farahani has had many grants over last 10 years from different industries.



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