

<<WAVELETS IN INTELLIG>>

图书基本信息

书名：<<WAVELETS IN INTELLIGENT TRANSPORTATION SYSTEMS增强计算智能的子波>>

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作者：Karim, Asim Salimul

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内容概要

This book shows how wavelets can be used to enhance computational intelligence for chaotic and complex pattern recognition problems. By integrating wavelets with other soft computing techniques such as neurocomputing and fuzzy logic, complicated and noisy pattern recognition problems can be solved effectively. The book focuses on applications in intelligent transportation systems (ITS) where a number of very complicated pattern recognition problems have eluded researchers over the past few decades. Advancing the frontiers of computational intelligence, this book: Describes ingenious computational models based on novel problem solving and computing techniques such as Case-Based Reasoning, Neurocomputing, and Wavelets, and presents examples to illustrate their importance and use. Presents a multi-paradigm intelligent systems approach to the freeway traffic incident detection and construction work zone management problems. Advocates application and integration of wavelets, neural networks and fuzzy logic for modeling the complex traffic flow behaviors leading to effective and efficient control and management solutions. Presents efficient, reliable, and robust algorithms for automatic detection of incidents on freeways. Wavelets in Intelligent Transportation Systems is an invaluable resource for computational intelligence researchers and transportation engineers involved in the application of advanced computational techniques for ITS.

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