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<<实时分布系统中基于知识的软件发展K>>

图书基本信息

书名：<<实时分布系统中基于知识的软件发展KNOWLEDGE-BASED SOFTWARE DEVELOPMENT FOR REAL-TIME DISTRIBUTED SYSTEMS>>

13位ISBN编号：9789810211288

10位ISBN编号：9810211287

出版时间：2001-12

出版时间：中国矿大出版社

作者：Tsai, Jeffrey J. -P

页数：234

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内容概要

The interplay of artificial intelligence and software engineering has been an interesting and an active area in research institution and industry. This book covers the state of the art in the use of knowledge-based approaches for software specification, design, implementation, testing and debugging. Starting with an introduction to various software engineering paradigms and knowledge-based software systems, the book continues with the discussion of using hybrid knowledge representation as a basis to specify software requirements, to facilitate specification analysis and transformation of real-time distributed software systems. A formal requirements specification language using non-monotonic logic, temporal logic, frames and production systems for new software engineering paradigms (such as rapid prototyping, operational specification and transformational implementation) is also discussed in detail. Examples from switching and other applications are used to illustrate the requirements language. Finally, the development, specification and verification of knowledge-based systems are investigated.作者简介：Jeffrey J-P Tsai is an associate Professor in the Department of Electrical Engineering andComputer Science at the University of Illinois, Chicago, USA. He obtained his Ph.D.degree in Computer Science from North-western University. He has published over 100 papers in the areas of Distributed Real-Time Systems, Artificial Intelligence and Software Engineering. He received the IEEE Research Award in 1988 and is an IEEE Distinguished Visitor, 1993-1994. He is a guest editor of the IEEE Transactions on Knowledge and Data Engineering on Depen-dability of A.I. Systems, 994, and an editor of the International Journal of Software Eng-ineering and Knowledge ngineering, the International Journal of Artificial Intelligence Tools, and the International Journal of Systems Integration.

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