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Titolo	Explainable and Customizable Job Sequencing and Scheduling : Advancing Production Control and Management with XAI / / by Tin-Chih Toly Chen
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Nota di contenuto	Chapter 1. Explainable Artificial Intelligence (XAI) -- Chapter 2. Artificial Intelligence (AI) Applications in Job Sequencing and Scheduling -- Chapter 3. XAI Applications to Job sequencing and Scheduling -- Chapter 4. Explaining Artificial Neural Network and Deep Learning Applications in Job Sequencing and Scheduling -- Chapter 5. Explaining Genetic Algorithm and Other Bio-inspired Algorithm Applications in Job Sequencing and Scheduling -- Chapter 6. Tailoring Scheduling Rules Using XAI -- Chapter 7. XAI-enabled Edge Computing Application in Job Sequencing and Scheduling.
Sommario/riassunto	This book systematically reviews the progress in explainable AI (XAI) and introduces the methods, tools, and applications of XAI

technologies in job sequencing and scheduling. Relevant references and real case studies are provided as supporting evidence. To date, artificial intelligence (AI) technologies have been widely applied in job sequencing and scheduling. However, some advanced AI methods are not easy to understand or communicate, especially for factory workers with insufficient background knowledge of AI. This undoubtedly limits the practicability of these methods. To address this issue, explainable AI has been considered a viable strategy. XAI methods suitable for job sequencing and scheduling differ from those for other fields in manufacturing, such as pattern recognition, defect analysis, estimation, and prediction. This is the first book to systematically integrate current knowledge in XAI and demonstrate its application to manufacturing.
