Record Nr. UNINA9910483471703321 Autore Alsolami Fawaz Titolo Decision and Inhibitory Trees and Rules for Decision Tables with Manyvalued Decisions / / by Fawaz Alsolami, Mohammad Azad, Igor Chikalov, Mikhail Moshkov Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 3-030-12854-7 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (276 pages) Collana Intelligent Systems Reference Library, , 1868-4408; ; 156 658.403 Disciplina Soggetti Computational intelligence Artificial intelligence Mathematical optimization Computational Intelligence Artificial Intelligence Optimization Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The results presented here (including the assessment of a new tool – inhibitory trees) offer valuable tools for researchers in the areas of data mining, knowledge discovery, and machine learning, especially those whose work involves decision tables with many-valued decisions. The authors consider various examples of problems and corresponding decision tables with many-valued decisions, discuss the difference between decision and inhibitory trees and rules, and develop tools for their analysis and design. Applications include the study of totally optimal (optimal in relation to a number of criteria simultaneously) decision and inhibitory trees and rules; the comparison of greedy heuristics for tree and rule construction as single-criterion and bi-

criteria optimization algorithms; and the development of a restricted

multi-pruning approach used in classification and knowledge

representation.