1. Record Nr. UNINA9910751390303321 Autore Chrysafiadi Konstantina Titolo Fuzzy Logic-Based Software Systems Cham:,: Springer International Publishing AG,, 2023 Pubbl/distr/stampa ©2023 **ISBN** 9783031444579 9783031444562 Edizione [1st ed.] Descrizione fisica 1 online resource (187 pages) Learning and Analytics in Intelligent Systems Series; ; v.34 Collana Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Intro -- Series Editors' Foreword -- Bibliography -- Preface --References -- Contents -- Abbreviations -- 1 Fuzzy Logic -- 1.1 Introduction -- 1.1.1 Fuzzy Sets and Basic Concepts -- 1.1.2 Basic Operations of the Fuzzy Sets -- 1.1.3 Relationships Between Fuzzy Sets -- 1.2 Fuzzy Inference System -- 1.2.1 Mamdani Fuzzy Inference System -- 1.2.2 Takagi-Sugeno Fuzzy Inference System -- 1.2.3 Differences Between Mandani FIS and Takagi-Sugeno FIS -- Reference -- 2 The Role of Fuzzy Logic in Artificial Intelligence and Smart Applications -- 2.1 Fuzzy C-means -- 2.2 Adaptive Neuro Fuzzy Inference System -- 3 Fuzzy Logic-Based Software Systems -- 3.1 Fuzzy Logic-Based Medical Systems -- 3.1.1 Examples of Fuzzy Diagnostic Medical Systems -- 3.1.2 Examples of Fuzzy Medical Image Analysis and/or Segmentation -- 3.2 Fuzzy Logic-Based Tutoring Systems -- 3.2.1 Fuzzy-Based Student Models -- 3.2.2 Fuzzy Logic for Student's Performance Prediction -- 3.2.3 Fuzzy Logic for Student's Performance Evaluation -- 3.2.4 Fuzzy Logic for Adaptive Assessment -- 3.3 Decision Making Support and Recommended Fuzzy Logic-Based Systems -- 3.4 Fuzzy Logic-Based Natural Language Processing Systems -- 3.5 Fuzzy Logic in Automotive Systems -- 3.6 Scheduling. Network Traffic and Security Fuzzy Logic-Based Software Systems --3.6.1 Fuzzy Logic in Task Scheduling -- 3.6.2 Fuzzy Logic in Network

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