Record Nr. UNINA9910254190803321 Autore Argüelles Mendez Luis Titolo A Practical Introduction to Fuzzy Logic using LISP [[electronic resource] /] / by Luis Argüelles Mendez Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 **ISBN** 3-319-23186-3 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XV, 370 p. 109 illus., 1 illus. in color.) Collana Studies in Fuzziness and Soft Computing, , 1434-9922;; 327 511.3 Disciplina Soggetti Computational intelligence Control engineering Artificial intelligence Observations, Astronomical Astronomy—Observations Computational Intelligence Control and Systems Theory Artificial Intelligence Astronomy, Observations and Techniques Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Discovering Lisp -- Lists everywhere.- Functions in Lisp -- Lisp Programming -- From Crisp Sets to Fuzzy Sets -- From Fuzzy Sets to Linguistic Variables -- Fuzzy Logic -- Practical Projects using FuzzyLisp.-. Sommario/riassunto This book makes use of the LISP programming language to provide readers with the necessary background to understand and use fuzzy logic to solve simple to medium-complexity real-world problems. It introduces the basics of LISP required to use a Fuzzy LISP programming toolbox, which was specifically implemented by the author to "teach" the theory behind fuzzy logic and at the same time equip readers to use their newly-acquired knowledge to build fuzzy models of increasing complexity. The book fills an important gap in the literature. providing readers with a practice-oriented reference guide to fuzzy

logic that offers more complexity than popular books yet is more

accessible than other mathematical treatises on the topic. As such, students in first-year university courses with a basic tertiary mathematical background and no previous experience with programming should be able to easily follow the content. The book is intended for students and professionals in the fields of computer science and engineering, as well as disciplines including astronomy, biology, medicine and earth sciences. Software developers may also benefit from this book, which is intended as both an introductory textbook and self-study reference guide to fuzzy logic and its applications. The complete set of functions that make up the Fuzzy LISP programming toolbox can be downloaded from a companion book's website.