Record Nr. UNINA9910483834903321 Autore Savi Miloš Titolo Complex Networks in Software, Knowledge, and Social Systems / / by Miloš Savi, Mirjana Ivanovi, Lakhmi C. Jain Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-319-91196-1 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XX, 317 p. 39 illus., 36 illus. in color.) Collana Intelligent Systems Reference Library, , 1868-4394;; 148 003 Disciplina Soggetti Computational intelligence Computational complexity Artificial intelligence **Physics** Library science Computational Intelligence Complexity Artificial Intelligence Applications of Graph Theory and Complex Networks Library Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction to Complex Networks -- Fundamentals of Complex Nota di contenuto Network Analysis -- Analysis of Software Networks -- Analysis of Ontology Networks -- Co-authorship Networks: An Introduction --Extraction of Co-authorship Networks -- Analysis of Co-authorship Networks... Sommario/riassunto This book provides a comprehensive review of complex networks from three different domains, presents novel methods for analyzing them, and highlights applications with accompanying case studies. Special emphasis is placed on three specific kinds of complex networks of high technological and scientific importance: software networks extracted from the source code of computer programs, ontology networks describing semantic web ontologies, and co-authorship networks reflecting collaboration in science. The book is primarily intended for

researchers, teachers and students interested in complex networks and network data analysis. However, it will also be valuable for researchers dealing with software engineering, ontology engineering and scientometrics, as it demonstrates how complex network analysis can be used to address important research issues in these three disciplines.