1. Record Nr. UNINA9910254347003321 Autore Kulkarni Anand Jayant Titolo Cohort Intelligence: A Socio-inspired Optimization Method / / by Anand Jayant Kulkarni, Ganesh Krishnasamy, Ajith Abraham Cham:,: Springer International Publishing:,: Imprint: Springer., Pubbl/distr/stampa 2017 **ISBN** 3-319-44254-6 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XI, 134 p. 29 illus.) Collana Intelligent Systems Reference Library, , 1868-4394;; 114 006.3 Disciplina Soggetti Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters. Nota di bibliografia Introduction To Optimization -- Socio-Inspired Optimization Using Nota di contenuto Cohort Intelligence -- Cohort Intelligence For Constrained Test Problems -- Modified Cohort Intelligence For Solving Machine Learning Problems -- Solution To 0-1 Knapsack Problem Using Cohort Intelligence Algorithm -- Cohort Intelligence For Solving Travelling Salesman Problems -- Solution To A New Variant Of The Assignment Problem Using Cohort Intelligence Algorithm -- Solution To Sea Cargo Mix (Scm) Problem Using Cohort Intelligence Algorithm -- Solution To The Selection Of Cross-Border Shippers (Scbs) Problem -- Conclusions And Future Directions. Sommario/riassunto This Volume discusses the underlying principles and analysis of the different concepts associated with an emerging socio-inspired optimization tool referred to as Cohort Intelligence (CI). CI algorithms have been coded in Matlab and are freely available from the link provided inside the book. The book demonstrates the ability of CI methodology for solving combinatorial problems such as Traveling Salesman Problem and Knapsack Problem in addition to real world applications from the healthcare, inventory, supply chain optimization and Cross-Border transportation. The inherent ability of handling

constraints based on probability distribution is also revealed and

proved using these problems. .