Record Nr. UNINA9910303449403321 Autore Chang Lijun Titolo Cohesive Subgraph Computation over Large Sparse Graphs: Algorithms, Data Structures, and Programming Techniques / / by Lijun Chang, Lu Qin Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 **ISBN** 3-030-03599-9 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (113 pages) Collana Springer Series in the Data Sciences, , 2365-5674 Disciplina 511.5 Soggetti **Algorithms** Data structures (Computer science) **Data Structures** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Linear Heap Data Structures -- Minimum Degree-based Core Decomposition -- Average Degree-based Densest Subgraph Computation -- Higher-order Structure-based Graph Decomposition -- Edge Connectivity-based Graph Decomposition. Sommario/riassunto This book is considered the first extended survey on algorithms and techniques for efficient cohesive subgraph computation. With rapid development of information technology, huge volumes of graph data are accumulated. An availability of rich graph data not only brings great opportunities for realizing big values of data to serve key applications, but also brings great challenges in computation. Using a consistent terminology, the book gives an excellent introduction to the models and algorithms for the problem of cohesive subgraph computation. The materials of this book are well organized from introductory content to more advanced topics while also providing well-designed source codes for most algorithms described in the book. This is a timely book for researchers who are interested in this topic and efficient data structure

design for large sparse graph processing. It is also a guideline book for

new researchers to get to know the area of cohesive subgraph

computation.