1. Record Nr. UNINA9910797350103321 Autore **Powell James** Titolo A librarian's guide to graphs, data and the semantic web // James Powell and Matthew Hopkins, Los Alamos National Laboratory Pubbl/distr/stampa Waltham, MA:,: Chandos Publishing,, [2015] 2015 **ISBN** 1-78063-434-X 1-84334-753-9 Edizione [1st edition] Descrizione fisica 1 online resource (xxvi, 242 pages) : illustrations (chiefly color) Chandos information professional series Collana Disciplina 025.0427 Soggetti Semantic web Graph theory Libraries and the Internet Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 5 OntologiesOntological autometamorphosis; Introduction to ontologies; Ontology development steps; Building blocks of ontologies; Ontology building tutorial; Ontologies and logic; 6 SPARQL; Triple patterns for search; SPARQL; SPARQL query endpoint; SPARQL 1.1; 7 Inferencing, reasoning, and rules; Mechanical thought; Intelligent computers; Language to logic; Inferencing; Logic notation; Challenges and pitfalls of rules; Reasoners and rules; SWRL; N3 rules; Final considerations; 8 Understanding Linked Data; Demons and genies; Characteristics of Linked Data; Linked Data requirements summary Is it contagious? The city effect: 13 Networks in chemistry and physics: The best T-shirts graph theory has to offer; Percolation; Phase transitions; Synchronization; Quantum interactions and crystals; 14 Social networks: Six degrees of separation: It's a small world: Social network analysis; 15 Upper ontologies; A unifying framework for knowledge; Friend of a Friend; Organization; Event; Provenance; Aggregations: Data Sets: Thesaurus: Measurements: Geospatial: Geonames; WGS84; Spatial; 16 Library metadata ontologies; Where are

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## Sommario/riassunto

Graphs are about connections, and are an important part of our connected and data-driven world. A Librarian's Guide to Graphs, Data and the Semantic Web is geared toward library and information science professionals, including librarians, software developers and information systems architects who want to understand the fundamentals of graph theory, how it is used to represent and explore data, and how it relates to the semantic web. This title provides a firm grounding in the field at a level suitable for a broad audience, with an emphasis on open source solutions and what problems these tools