1. Record Nr. UNINA9911006788503321

Autore Rochester Eric

Titolo Clojure data analysis cookbook / / Eric Rochester

Pubbl/distr/stampa Birmingham, UK, : Packt Pub., c2013

ISBN 1-68015-416-8

> 1-299-44085-1 1-78216-265-8

Edizione [1st edition]

Descrizione fisica 1 online resource (342 p.)

Disciplina 005.133

Soggetti Database searching

Clojure (Computer program language)

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

Nota di contenuto Cover; Copyright; Credits; About the Author; About the Reviewers;

> www.PacktPub.com: Table of Contents: Preface: Chapter 1: Importing Data for Analysis; Introduction; Creating a new project; Reading CSV data into Incanter datasets; Reading JSON data into Incanter datasets; Reading data from Excel with Incanter; Reading data from JDBC databases; Reading XML data into Incanter datasets; Scraping data from tables in web pages; Scraping textual data from web pages; Reading RDF data; Reading RDF data with SPARQL; Aggregating data from different formats; Chapter 2: Cleaning and Validating Data IntroductionCleaning data with regular expressions; Maintaining consistency with synonym maps: Identifying and removing duplicate data; Normalizing numbers; Rescaling values; Normalizing dates and times; Lazily processing very large data sets; Sampling from very large data sets; Fixing spelling errors; Parsing custom data formats; Validating data with Valip; Chapter 3: Managing Complexity with Concurrent Programming; Introduction; Managing program complexity with STM; Managing program complexity with agents; Getting better performance with commute; Combining agents and STM

Maintaining consistency with ensureIntroducing safe side effects into

the STM; Maintaining data consistency with validators; Tracking

processing with watchers: Debugging concurrent programs with

watchers; Recovering from errors in agents; Managing input with sized queues; Chapter 4: Improving Performance with Parallel Programming; Introduction; Parallelizing processing with pmap; Parallelizing processing with Incanter; Partitioning Monte Carlo simulations for better pmap performance; Finding the optimal partition size with simulated annealing; Parallelizing with reducers

Generating online summary statistics with reducersHarnessing your GPU with OpenCL and Calx; Using type hints; Benchmarking with Criterium; Chapter 5: Distributed Data Processing with Cascalog; Introduction; Distributed processing with Cascalog and Hadoop; Querying data with Cascalog; Distributing data with Apache HDFS; Parsing CSV files with Cascalog; Complex queries with Cascalog; Aggregating data with Cascalog; Defining new Cascalog operators; Composing Cascalog queries; Handling errors in Cascalog workflows; Transforming data with Cascalog

Executing Cascalog queries in the Cloud with PalletChapter 6: Working with Incanter Datasets; Introduction; Loading Incanter's sample datasets; Loading Clojure data structures into datasets; Viewing datasets interactively with view; Converting datasets to matrices; Using infix formulas in Incanter; Selecting columns with; Selecting rows with; Filtering datasets with where; Grouping data with group-by; Saving datasets to CSV and JSON; Projecting from multiple datasets with join; Chapter 7: Preparing for and Performing Statistical Data Analysis with Incanter; Introduction

Generating summary statistics with rollup

Sommario/riassunto

Full of practical tips, the ""Clojure Data Analysis Cookbook"" will help you fully utilize your data through a series of step-by-step, real world recipes covering every aspect of data analysis. Prior experience with Clojure and data analysis techniques and workflows will be beneficial, but not essential.