Record Nr. UNINA9910793524603321

Autore Balbaert Ivo

Titolo Julia 1. 0 programming complete reference guide : discover julia, a

high-performance language for technical computing / / Ivo Balbaert,

Adrian Salceanu

Pubbl/distr/stampa Birmingham; ; Mumbai:,: Packt,, 2019

ISBN 1-83882-467-7

Edizione [1st edition]

Descrizione fisica 1 online resource (441 pages)

Disciplina 005.13

Soggetti Programming languages (Electronic computers)

Application software - Development

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Sommario/riassunto Learn dynamic programming with Julia to build apps for data analysis,

visualization, machine learning, and the web Key Features Leverage Julia's high speed and efficiency to build fast, efficient applications Perform supervised and unsupervised machine learning and time series analysis Tackle problems concurrently and in a distributed environment Book Description Julia offers the high productivity and ease of use of Python and R with the lightning-fast speed of C++. There's never been a better time to learn this language, thanks to its large-scale adoption across a wide range of domains, including fintech, biotech and artificial intelligence (AI). You will begin by learning how to set up a running Julia platform, before exploring its various built-in types. This Learning Path walks you through two important collection types: arrays and matrices. You'll be taken through how type conversions and promotions work, and in further chapters you'll study how Julia interacts with operating systems and other languages. You'll also learn about the use of macros, what makes Julia suitable for numerical and scientific computing, and how to run external programs. Once you have grasped the basics, this Learning Path goes on to how to analyze the Iris dataset using DataFrames. While building a web scraper and a web app, you'll

explore the use of functions, methods, and multiple dispatches. In the

final chapters, you'll delve into machine learning, where you'll build a book recommender system. By the end of this Learning Path, you'll be well versed with Julia and have the skills you need to leverage its high speed and efficiency for your applications. This Learning Path includes content from the following Packt products: Julia 1.0 Programming -Second Edition by Ivo Balbaert Julia Programming Projects by Adrian Salceanu What you will learn Create your own types to extend the builtin type system Visualize your data in Julia with plotting packages Explore the use of built-in macros for testing and debugging Integrate Julia with other languages such as C, Python, and MATLAB Analyze and manipulate datasets using Julia and DataFrames Develop and run a web app using Julia and the HTTP package Build a recommendation system using supervised machine learning Who this book is for If you are a statistician or data scientist who wants a quick course in the Julia programming language while building big data applications, this Learning Path is for you. Basic knowledge of m...