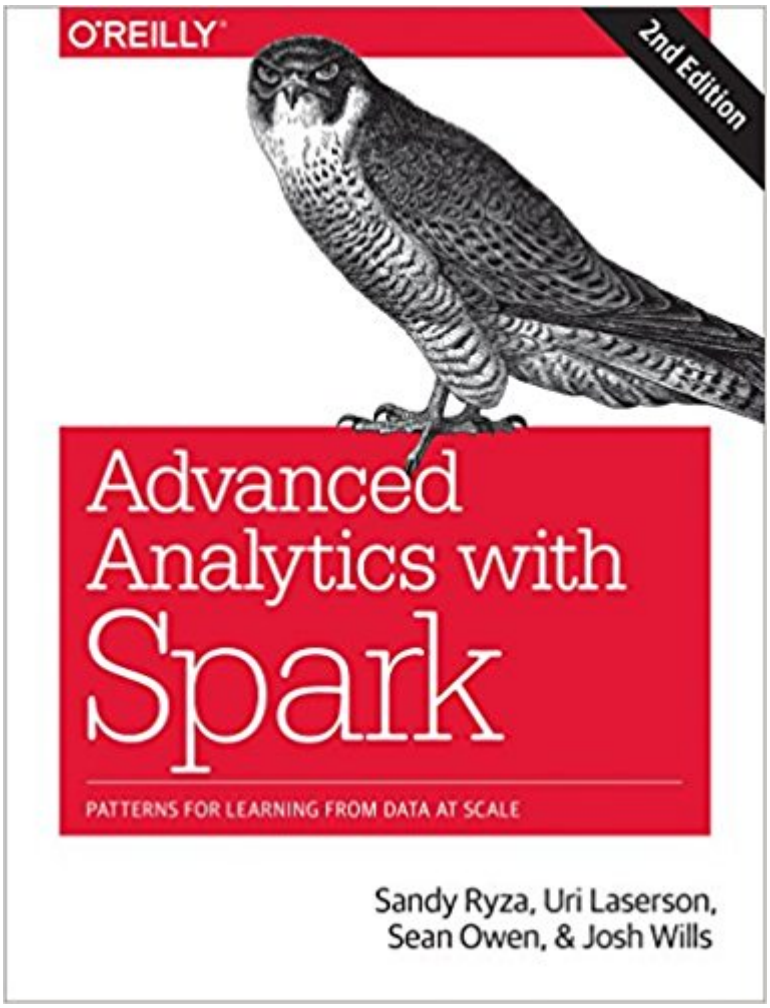
Advanced Analytics With Spark: Patterns For Learning From Data At Scale



Synopsis

In the second edition of this practical book, four Cloudera data scientists present a set of self-contained patterns for performing large-scale data analysis with Spark. The authors bring Spark, statistical methods, and real-world data sets together to teach you how to approach analytics problems by example. Updated for Spark 2.1, this edition acts as an introduction to these techniques and other best practices in Spark programming.YouÃ¢â ¬â„¢ll start with an introduction to Spark and its ecosystem, and then dive into patterns that apply common techniquesÃ¢â ¬â •including classification, clustering, collaborative filtering, and anomaly detectionÃ¢â ¬â •to fields such as genomics, security, and finance.If you have an entry-level understanding of machine learning and statistics, and you program in Java, Python, or Scala, youÃ¢â ¬â„¢ll find the bookÃ¢â ¬â„¢s patterns useful for working on your own data applications.With this book, you will:Familiarize yourself with the Spark programming modelBecome comfortable within the Spark ecosystemLearn general approaches in data scienceExamine complete implementations that analyze large public data setsDiscover which machine learning tools make sense for particular problemsAcquire code that can be adapted to many uses

Book Information

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View larger From the Preface WhatÃƒÂ¢Ã â ¬Ã â„¢s in This Book The first chapter will place Spark within the wider context of data science and big data analytics. After that, each chapter will comprise a self-contained analysis using Spark. The second chapter will introduce the basics of data processing in Spark and Scala through a use case in data cleansing. The next few chapters

will delve into the meat and potatoes of machine learning with Spark, applying some of the most common algorithms in canonical applications. The remaining chapters are a bit more of a grab bag and apply Spark in slightly more exotic applicationsÃƒÂ¢Ã â ¬Ã â •for example, querying Wikipedia through latent semantic relationships in the text or analyzing genomics data. The Second Edition Since the first edition, Spark has experienced a major version upgrade that instated an entirely new core API and sweeping changes in subcomponents like MLlib and Spark SQL. In the second edition, weÃƒÂ¢Ã â ¬Ã â„¢ve made major renovations to the example code and brought the materials up to date with SparkÃƒÂ¢Ã â ¬Ã â„¢s new best practices.

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