

Introduction to Data Science for Social and Policy Research

Real-world data sets are messy and complicated. Written for students in social science and public management, this authoritative but approachable guide describes all the tools needed to collect data and prepare it for analysis. Offering detailed, step-by-step instructions, it covers collection of many different types of data including web files, APIs, and maps; data cleaning; data formatting; the integration of different sources into a comprehensive data set; and storage using third-party tools to facilitate access and shareability (from Google Docs to GitHub).

Assuming no prior knowledge of R and Python, the author introduces programming concepts gradually, using real data sets that provide the reader with practical, functional experience.

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“It is rare indeed to pick up a new manuscript and immediately think how much you wish it had been written five years earlier, but I suspect many people will have that reaction to this book. This timely, thorough, and remarkably clear tutorial to both R and Python serves as a much needed on-ramp to the data part of data science, and will undoubtedly soon grace the bookshelves of many social scientists – both students and their instructors. If you are intrigued by the possibilities of data science but concerned about the start-up costs, look no further: help has arrived.”

Joshua Tucker, New York University

“If you need to develop new skills in R and Python but you don’t know where to start, this is the book for you. With simple language, Magallanes Reyes shows you how to install the programs, retrieve data using APIs and scrape Internet sources, and how to get the data ready for modeling. This book is a gem.”

Aníbal Pérez-Liñán, University of Pittsburgh

Introduction to Data Science for
Social and Policy Research
Collecting and Organizing Data
with R and Python

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