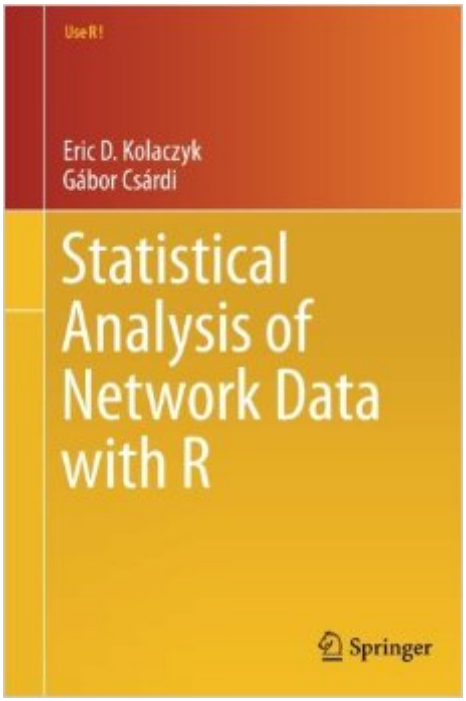
Statistical Analysis Of Network Data With R (Use R!)



Synopsis

Networks have permeated everyday life through everyday realities like the Internet, social networks, and viral marketing. As such, network analysis is an important growth area in the quantitative sciences, with roots in social network analysis going back to the 1930s and graph theory going back centuries. Measurement and analysis are integral components of network research. As a result, statistical methods play a critical role in network analysis. This book is the first of its kind in network research. It can be used as a stand-alone resource in which multiple R packages are used to illustrate how to conduct a wide range of network analyses, from basic manipulation and visualization, to summary and characterization, to modeling of network data. The central package is igraph, which provides extensive capabilities for studying network graphs in R. This text builds on Eric D. Kolaczykâ ™s book Statistical Analysis of Network Data (Springer, 2009).

Book Information

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Customer Reviews

This is a great introduction to the 'igraph' package for R. Someone who is just a beginner in using R can probably use this book, but it's probably best to have already been using it for some time. The 'igraph' package is pretty extensive, but this book will give you enough tools to explore what else the package can do.It also covers the basics of doing network analyses. It doesn't go very deeply into any topics, really (nor does it have proofs or much theory), so it is best used in conjunction with (or perhaps after reading) Kolaczyk's other text (http://amzn.com/038788145X). I used this after having used the other text.

Great book for network analysis (although you need to know a little bit of R before you can use it).

Very good and concise introduction to the main statistical concepts you'll need to analyze networks and examples well integrated throughout.

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