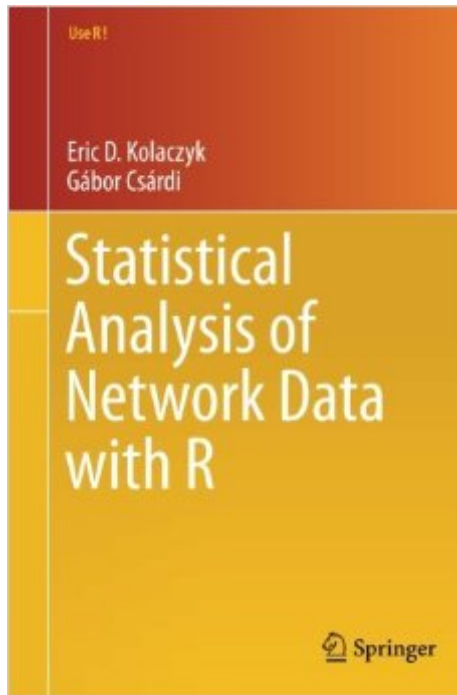# Statistical Analysis Of Network Data With R (Use R!)

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.

Data Analytics: Practical Data Analysis and Statistical Guide to Transform and Evolve Any Business Leveraging the Power of Data Analytics, Data Science, ... (Hacking Freedom and Data Driven Book 2) Statistical Analysis of Network Data with R (Use R!) Data Architecture: A Primer for the Data Scientist: Big Data, Data Warehouse and Data Vault Statistical Analysis of Network Data: Methods and Models (Springer Series in Statistics) Extending Simple Network Management Protocol (SNMP) Beyond Network Management: A MIB Architecture for Network-Centric Services Big Data For Beginners: Understanding SMART Big Data, Data Mining & Data Analytics For improved Business Performance, Life Decisions & More! The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences LEARN IN A DAY! DATA WAREHOUSING. Top Links and Resources for Learning Data Warehousing ONLINE and OFFLINE: Use these FREE and PAID resources to Learn Data Warehousing in little to no time Excel Conditional Formatting: Tips You Can Use Immediately To Make Your Data Stand Out (Data Analysis With Excel Book 3) Microsoft Excel 2013 Data Analysis and Business Modeling: Data Analysis and Business Modeling (Introducing) Data Hiding: Exposing Concealed Data in Multimedia, Operating Systems, Mobile Devices and Network Protocols Statistical Analysis of fMRI Data (MIT Press) Introductory R: A Beginner's Guide to Data Visualisation, Statistical Analysis and Programming in R Statistical Analysis with Missing Data The Statistical Analysis of Failure Time Data Graphics for Statistics and Data Analysis with R (Chapman & Hall/CRC Texts in Statistical Science) Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) Thermodynamics With Quantum Statistical Illustrations. Monographs in Statistical Physics and Thermodynamics, Volume 2 Discovering Knowledge in Data: An Introduction to Data Mining (Wiley Series on Methods and Applications in Data Mining) Big Data, MapReduce, Hadoop, and Spark with Python: Master Big Data Analytics and Data Wrangling with MapReduce Fundamentals using Hadoop, Spark, and Python