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## Social Media e Sentiment Analysis

L'evoluzione dei fenomeni sociali attraverso la Rete

Due miliardi e mezzo di utenti internet, oltre un miliardo di account Facebook, 550 milioni di profili Twitter. Che parlano, discutono, si confrontano sui temi più svariati. Un flusso in continuo divenire di informazioni che dà sostanza ogni giorno al mondo dei Big Data. Ma come si analizza concretamente il "sentiment" della Rete? Quali sono i pregi e i limiti dei diversi metodi esistenti? E a quali domande possiamo dare una risposta?

### Features

► Come si fa (e come non si deve fare) ad estrarre informazioni da dati testuali provenienti dal web ► Come gestire i big data generati dai social media utilizzando le tecniche statistiche corrette ► I social media come fonte di informazione e non un rumore di fondo

### Contents

1 Perché studiare i social media.- 2 Opinion Mining ed integrated Sentiment Analysis (iSA).- 3 Catturare l'evoluzione di una emozione.- 4 Sentiment Analysis ed elezioni: prevedere è possibile?.- 5 Conclusioni: Dai social media alla politica (e ritorno).

### Fields of interest

Statistics for Social Science, Behavioral Science, Education, Public Policy, and Law; Social Sciences, general; Data Mining and Knowledge Discovery

### Target groups

Professional/practitioner

### Product category

Monografia

T. J. Quirk, Webster University, St. Louis, MO, USA

## Excel 2010 for Engineering Statistics

A Guide to Solving Practical Problems

### Features

► Statistical theory and formulas are explained in clear language without bogging you down in mathematical fine points ► You will be told each step of the way, not only how to use Excel, but also why you are doing each step – so you can learn the techniques to apply Excel beyond this book ► You will learn both how to write statistical formulas and how to use drop-down menus to have Excel create formulas for you ► Includes 159 color screen shots so you can be sure you are performing Excel steps correctly ► Each chapter includes specific objectives for each concept so you know the purpose of the Excel steps ► Each chapter presents key steps needed to solve practical, easy-to-understand engineering science problems using Excel. In addition, three practice problems at the end of each chapter enable you to test your new knowledge.

### Contents

Introduction.- Sample size, mean, standard deviation, standard error of the mean.- Random number generator.- Confidence interval about the mean using the TINV function and hypothesis testing.- One-group t-test for the mean.- Two-group t-test of the difference of the means for independent groups.- Correlation and simple linear regression.- Multiple correlation and multiple regression.- One-way analysis of variance (ANOVA).- Appendix A.- Appendix B.- Appendix C.- Appendix D.- Appendix E.- Index.

### Fields of interest

Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences; Statistics and Computing/Statistics Programs; Statistics, general

### Target groups

Upper undergraduate

### Product category

Graduate/Advanced undergraduate textbook

D. O. Stram, University of Southern California Keck School of Medicine, Los Angeles, CA, USA

## Design, Analysis, and Interpretation of Genome-Wide Association Scans

This book presents the statistical aspects of designing, analyzing and interpreting the results of genome-wide association scans (GWAS studies) for genetic causes of disease using unrelated subjects. Particular detail is given to the practical aspects of employing the bioinformatics and data handling methods necessary to prepare data for statistical analysis. The goal in writing this book is to give statisticians, epidemiologists, and students in these fields the tools to design a powerful genome-wide study based on current technology.

### Features

► Ushers in future with GWAS studies as a more routine part of clinical trials of drugs, drug combination therapy and a part of the general goal of seeking personalized medicine ► Does not require previous work in genetics or genetic epidemiology ► Serves as both a reference and study guide for researchers, especially statisticians, working in these areas

### Contents

Introduction to Genome-Wide Association Studies.- Topics of Quantitative Genetics.- An Introduction to Association Studies.- Correcting for Hidden Population Structure in Single Marker Association Testing and Estimation.- Haplotype Imputation for Association Analysis.- SNP Imputation for Association Studies.- Design of Large-scale Genetic Association Studies, Sample Size and Power.- Post-GWAS Analyses.

### Fields of interest

Statistics for Life Sciences, Medicine, Health Sciences; Human Genetics; Statistical Theory and Methods

### Target groups

Research

### Product category

Monograph

Pubblicazione prevista per il mese di December 2013

2014. Approx. 200 pagg. (SxI - Springer for Innovation / SxI - Springer per l'Innovazione, Volume 9) Brossura

► approx. \* € (D) 30,86 | € (A) 31,72 | sFr 38,50

► approx. € 28,84 | £25,99

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Due December 2013

2014. VIII, 172 p. 159 illus., 158 in color. Softcover

► \* € (D) 53,49 | € (A) 54,99 | sFr 67,00

► € 49,99 | £44,99

ISBN 978-3-319-02829-3

Due November 2013

2014. XIV, 300 p. 39 illus., 9 in color. (Statistics for Biology and Health) Hardcover

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► € 84,99 | £76.50

ISBN 978-1-4614-9442-3



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N. G. Swenson, Michigan State University, East Lansing, MI, USA

## Phylogenetic and Functional Ecology in R

Phylogenetic and Functional Ecology in R is designed to teach readers to use R for phylogenetic and functional trait analyses. Over the past decade, a dizzying array of tools and methods were generated to incorporate phylogenetic and functional information into traditional ecological analyses. Increasingly these tools are implemented in R, thus greatly expanding their impact. Researchers getting started in R can use this volume as a step-by-step entryway into phylogenetic and functional analyses for ecology in R. More advanced users will be able to use this volume as a quick reference to understand particular analyses. The volume begins with an introduction to the R environment and handling relevant data in R.

### Features

► Covers computational tools utilized to study phylogenetic and trait analyses ► Utilizes actual data sets from the fields of ecology and plant biology ► Integrates R code and commands with C and Python software programs

### Contents

Preface.- Introduction.- Phylogenetic Data in R.- Phylogenetic Diversity.- Functional Diversity.- Phylogenetic & Functional Beta Diversity.- Null Models.- Comparative Methods & Phylogenetic Signal.- Partitioning the Phylogenetic, Functional, Environmental and Spatial Components of Community Diversity.- Integrating R with Other Phylogenetic and Functional Trait Analytical Software.- References.- Index

### Fields of interest

Statistics and Computing/Statistics Programs;  
Ecology; Evolutionary Biology

### Target groups

Research

### Product category

Monograph

Due December 2013

2014. X, 175 p. 25 illus. (Use R!) Softcover

► approx. \* € (D) 42,75 | € (A) 43,95 | sFr 49,50

► approx. € 39,95 | £33.99

ISBN 978-1-4614-9541-3



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