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Autore Cleophas Ton J

Titolo Application of Regularized Regressions to Identify Novel Predictors in Clinical Research / / by Ton J. Cleophas, Aeilko H. Zwinderman

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Descrizione fisica 1 online resource (274 pages)

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Disciplina 610

Soggetti Medical sciences
Statistics
Health Sciences
Applied Statistics

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di contenuto -- Basic Principles of Regression Analysis. -- Optimal Scaling, Discretization, and Regularization vs Traditional Linear Regression. -- Regularized Regression Analysis, Ridge, Lasso, Elastic Net Regression Coefficients. -- Effect of Predictors on Health Scores, 110 Patients, Traditional vs Regularized Regressions. -- Effect on Physical strength of Races, 60 Patients, Traditional Regression vs Regularized regressions. -- Effects of Genetic Polymorphisms on Clinical Outcomes, 250 Patients, Traditional vs Regularized Regressions. -- Effect of Old Treatment and Age on New Treatment, 35 Patients, Traditional vs Regularized Regressions. -- Effect on Paroxysmal Atrial Fibrillations of Four Predictors, 50 Patients, Traditional vs Regularized Regressions. -- Effect of Air Quality of Operating Rooms on Infections, 8 Operating Rooms, Traditional vs Regularized Regressions. -- Effect on Weightloss of Age, Calorieintake, Exercise, Interaction, 64 Patients, Traditional vs Regularized Regressions. -- Effect on Body Surface Measured of Gender, Age, Weight, Height, and Weight x Height Interaction, 90 Patients, Traditional vs Regularized Regressions. -- Effect on Paroxysmal Atrial Fibrillations of Gender, Treatment and Their Interaction, 40 Patients, Traditional vs Regularized Regressions. --

Effect on Hours of Sleep of Treatment Group, Age, Gender, Comorbidity, 20 Patients, Traditional vs Regularized Regressions. -- Effect of Betaagonist and Prednisone on Peak Expiratory Flow, 78 COPD Patients, Traditional vs Regularized Regressions. -- Effect on LDL Cholesterol Reduction of Five Predictors, 953 Patients, Traditional vs Regularized Regressions. -- Effect of Five Factors on Body Weight, 217 Patients, Traditional vs Regularized Regressions. -- Functional Data Analysis and Regularized Regressions.

Sommario/riassunto	This textbook is an important novel menu for multiple variables regression entitled "regularized regression". It is a must have for identifying unidentified leading factors. Also, you get fitted parameters for your overfitted data. Finally, there is no more need for commonly misunderstood p-values. Instead, the regression coefficient, R-value, as reported from a regression line has been applied as the key predictive estimator of the regression study. With simple one by one variable regression it is no wider than -1 to +1. With multiple variables regression it can easily get > +1 or < -1. This means we have a seriously flawed regression model, mostly due to collinearity or non-linear data. Completing the analysis will lead to overfitting, and thus a meaningless significant study due to data spread wider than compatible with random. In order for the regression coefficients to remain in the right size, fortunately a shrinking procedure has been invented. In the past two decades regularized regression has become a major topic of research, particularly with high dimensional data. Yet, the method is pretty new and infrequently used in real-data analysis. Its performance as compared to traditional null hypothesis testing has to be confirmed by prospective comparisons. Most studies published to date are of a theoretical nature involving statistical modeling and simulation studies. The journals Nature and Science published 19 and 10 papers of this sort in the past 8 years. The current edition will for the first time systematically test regularized regression against traditional regression analysis in 20 clinical data examples. The edition is also a textbook and tutorial for medical and healthcare students as well as recollection bench and help desk for professionals. Each chapter can be studied as a standalone, and, using, real as well as hypothesized data, it tests the performance of the novel methodology against traditional regressions. Step by step analyses of 20 data files are included for self-assessment. The authors are well qualified in their field. Professor Zwinderman is past-president of the International Society of Biostatistics and Professor Cleophas is past-president of the American College of Angiology. The authors have been working together for 25 years and their research can be characterized as a continued effort to demonstrate that clinical data analysis is a discipline at the interface of biology and mathematics.

2.	Record Nr.	UNINA9910409993903321
	Autore	Willman Joshua M
	Titolo	Beginning PyQt : A Hands-on Approach to GUI Programming / / by Joshua M. Willman
	Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2020
	ISBN	9781484258576
		1484258576
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (449 pages)
	Disciplina	005.43
	Soggetti	Python (Computer program language)
		Programming languages (Electronic computers)
		Open source software
		Computer programming
		Python
		Programming Languages, Compilers, Interpreters
		Open Source
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes index.
	Nota di contenuto	Chapter 1 - Charting the Course -- Chapter 2 - Getting Started -- Chapter 3 - Adding Functions Through Buttons -- Chapter 4 - Learning about Layout -- Chapter 5 - Menus, Toolbars,and More -- Chapter 6 - Styling Your GUIs -- Chapter 7 - Creating GUIs with Qt Designer -- Chapter 8 - Working with the Clipboard -- Chapter 9 - Graphics and Animation in PyQt -- Chapter 10 - Intro to Handling Databases -- Chapter 11 - Asynchronous Programming -- Chapter 12 - Extra Projects -- Appendix A - Reference Guide for PyQt -- Appendix B - Python Refresher.
	Sommario/riassunto	Learn GUI application development from the ground up, taking a practical approach by building simple projects that teach the fundamentals of using PyQt. Each chapter gradually moves on to teach more advanced and diverse concepts to aid you in designing interesting applications using the latest version of PyQt. You'll start by reviewing the beginning steps of GUI development from, using different projects in every chapter to teach new widgets or concepts that will help you to

build better UIs. As you follow along, you will construct more elaborate GUIs,covering topics that include storing data using the clipboard, graphics and animation, support for SQL databases, and multithreading applications. Using this knowledge, you'll be able to build a photo editor, games, a text editor, a working web browser and an assortment of other GUIs. Beginning PyQt will guide you through the process of creating UIs to help you bring your own ideas to life. Learn what is necessary to begin making your own applications and more with PyQt! You will: Create your own cross-platform GUIs with PyQt and Python Use PyQt's many widgets and apply them to building real applications Build larger applications and break the steps into smaller parts for deeper understanding Work with complex applications in PyQt, from animation to databases and more.