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Sommario/riassunto

Any method of fitting equations to data may be called regression. Such equations are valuable for at least two purposes: making predictions and judging the strength of relationships. Because they provide a way of empirically identifying how a variable is affected by other variables, regression methods have become essential in a wide range of fields, including the social sciences, engineering, medical research and business. Of the various methods of performing regression, least squares is the most widely used. In fact, linear least squares regression is by far the most widely used of any statistical technique. Although nonlinear least squares is covered in an appendix, this book is mainly about linear least squares applied to fit a single equation (as opposed to a system of equations). The writing of this book started in 1982. Since then, various drafts have been used at the University of Toronto for teaching a semester-long course to juniors, seniors and graduate students in a number of fields, including statistics, pharmacology, engineering, economics, forestry and the behavioral sciences. Parts of the book have also been used in a quarter-long course given to Master's and Ph.D. students in public administration, urban planning

and engineering at the University of Illinois at Chicago (UIC). This experience and the comments and criticisms from students helped forge the final version.
