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	Titolo	Statistical Regression Modeling with R : Longitudinal and Multi-level Modeling / / by Ding-Geng (Din) Chen, Jenny K. Chen
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	Disciplina	519.536
	Soggetti	Statistics
		Programming languages (Electronic computers)
		Statistical Theory and Methods
		Applied Statistics
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	Nota di contenuto	1. Linear Regression -- 2. Introduction to Multi-Level Regression -- 3. Two-Level Multi-Level Modeling -- 4. Higher-Level Multi-Level Modeling -- 5. Longitudinal Data Analysis -- 6. Nonlinear Regression Modeling -- 7. Nonlinear Mixed-Effects Modeling -- 8. Generalized Linear Model -- 9. Generalized Multi-Level Model for Dichotomous Outcome -- 10. Generalized Multi-Level Model for Counts Outcome.
	Sommario/riassunto	This book provides a concise point of reference for the most commonly used regression methods. It begins with linear and nonlinear regression for normally distributed data, logistic regression for binomially distributed data, and Poisson regression and negative-binomial regression for count data. It then progresses to these regression models that work with longitudinal and multi-level data structures. The volume is designed to guide the transition from classical to more advanced regression modeling, as well as to contribute to the rapid development of statistics and data science. With data and computing

programs available to facilitate readers' learning experience, Statistical Regression Modeling promotes the applications of R in linear, nonlinear, longitudinal and multi-level regression. All included datasets, as well as the associated R program in packages nlme and lme4 for multi-level regression, are detailed in Appendix A. This book will be valuable in graduate courses on applied regression, as well as for practitioners and researchers in the fields of data science, statistical analytics, public health, and related fields.