1. Record Nr. UNINA9910437844503321

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Titolo	Machine Learning in Medicine / / by Ton J. Cleophas, Aeilko H. Zwinderman
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2013
ISBN	94-007-5824-3
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (270 p.)
Disciplina	610.28563
Soggetti	Medicine Entomology Statistics Optical data processing Literacy Biomedicine, general Medicine/Public Health, general Statistics, general Computer Imaging, Vision, Pattern Recognition and Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- 1 Introduction to machine learning -- 2 Logistic regression for health profiling -- 3 Optimal scaling: discretization -- 4 Optimal scaling: regularization including ridge, lasso, and elastic net regression -- 5 Partial correlations -- 6 Mixed linear modelling -- 7 Binary partitioning -- 8 Item response modelling -- 9 Time-dependent predictor modelling -- 10 Seasonality assessments -- 11 Non-linear modelling -- 12 Artificial intelligence, multilayer Perceptron modelling -- 13 Artificial intelligence, radial basis function modelling -- 14 Factor analysis -- 15 Hierarchical cluster analysis for unsupervised data -- 16 Partial least squares -- 17 Discriminant analysis for Supervised data -- 18 Canonical regression -- 19 Fuzzy modelling -- 20 Conclusions. Index.

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Sommario/riassunto	Machine learning is a novel discipline concerned with the analysis of large and multiple variables data. It involves computationally intensive methods, like factor analysis, cluster analysis, and discriminant analysis. It is currently mainly the domain of computer scientists, and is already commonly used in social sciences, marketing research, operational research and applied sciences. It is virtually unused in clinical research. This is probably due to the traditional belief of clinicians in clinical trials where multiple variables are equally balanced by the randomization process and are not further taken into account. In contrast, modern computer data files often involve hundreds of variables like genes and other laboratory values, and computationally intensive methods are required. This book was written as a hand-hold presentation accessible to clinicians, and as a must-read publication for those new to the methods.