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Altri autori (Persone)	IrfanSayed Ameenuddin TeohChristopher
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Nota di contenuto	Cover -- Title -- Copyright -- End User License Agreement -- Content -- Preface -- Introduction to Machine Learning -- Linear Regression -- Regularization -- Logistic Regression -- Decision Tree -- Gradient Boosting -- Support Vector Machine -- K-means Clustering -- Subject Index
Sommario/riassunto	Numerical Machine Learning is a simple textbook on machine learning that bridges the gap between mathematics theory and practice. The book uses numerical examples with small datasets and simple Python codes to provide a complete walkthrough of the underlying mathematical steps of seven commonly used machine learning algorithms and techniques, including linear regression, regularization,

logistic regression, decision trees, gradient boosting, Support Vector Machine, and K-means Clustering. Through a step-by-step exploration of concrete numerical examples, the students (primarily undergraduate and graduate students studying machine learning) can develop a well-rounded understanding of these algorithms, gain an in-depth knowledge of how the mathematics relates to the implementation and performance of the algorithms, and be better equipped to apply them to practical problems. Key features - Provides a concise introduction to numerical concepts in machine learning in simple terms - Explains the 7 basic mathematical techniques used in machine learning problems, with over 60 illustrations and tables - Focuses on numerical examples while using small datasets for easy learning - Includes simple Python codes - Includes bibliographic references for advanced reading The text is essential for college and university-level students who are required to understand the fundamentals of machine learning in their courses.