1.	Record Nr.	UNINA9910270918703321
	Autore	Klemela Jussi <1965->
	Titolo	Nonparametric finance / / by Jussi Sakari Klemela
	Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2018 ©2018
	ISBN	1-119-40912-8 1-119-40911-X 1-119-40913-6
	Edizione	[1st edition]
	Descrizione fisica	1 online resource (72 pages) : illustrations, graphs
	Collana	Wiley series in probability and statistics
	Disciplina	332.0151954
	Soggetti	Finance - Statistical methods Finance - Mathematical models
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Sommario/riassunto	An Introduction to Machine Learning in Finance, With Mathematical Background, Data Visualization, and R Nonparametric function estimation is an important part of machine learning, which is becoming increasingly important in quantitative finance. Nonparametric Finance provides graduate students and finance professionals with a foundation in nonparametric function estimation and the underlying mathematics. Combining practical applications, mathematically rigorous presentation, and statistical data analysis into a single volume, this book presents detailed instruction in discrete chapters that allow readers to dip in as needed without reading from beginning to end. Coverage includes statistical finance, risk management, portfolio management, and securities pricing to provide a practical knowledge base, and the introductory chapter introduces basic finance concepts for readers with a strictly mathematical background. Economic significance is emphasized over statistical significance throughout, and R code is provided to help readers reproduce the research, computations, and figures being discussed. Strong graphical content clarifies the methods and demonstrates essential visualization techniques, while deep mathematical and statistical insight backs up

practical applications. Written for the leading edge of finance, Nonparametric Finance: • Introduces basic statistical finance concepts, including univariate and multivariate data analysis, time series analysis, and prediction • Provides risk management guidance through volatility prediction, quantiles, and value-at-risk • Examines portfolio theory, performance measurement, Markowitz portfolios, dynamic portfolio selection, and more • Discusses fundamental theorems of asset pricing, Black-Scholes pricing and hedging, quadratic pricing and hedging, option portfolios, interest rate derivatives, and other asset pricing principles • Provides supplementary R code and numerous graphics to reinforce complex content Nonparametric function estimation has received little attention in the context of risk management and option pricing, despite its useful applications and benefits. This book provides the essential background and practical knowledge needed to take full advantage of these little-used methods, and turn them into real-world advantage. Jussi Klemelä, PhD, is Adjunct Professor at the University of Oulu. His research interests include nonparametric function estimation, density estimation, and data visua...