1. Record Nr. UNICAMPANIASUN0103056

Autore	Nazaikinskii, Vladimir
Titolo	The localization problem in index theory of elliptic operators / Vladimir Nazaikinskii, Bert-Wolfgang Schulze, Boris Sternin
Pubbl/distr/stampa	VIII, 117 p. ; 24 cm
ISBN	8-3-0348-0509-4
Edizione	[Basel : Birkhäuser : Springer, 2014]
Descrizione fisica	Pubblicazione in formato elettronico
Altri autori (Persone)	Schulze, Bert-Wolfgang Sternin, Boris
Soggetti	58J20 - Index theory and related fixed point theorems on manifolds [MSC 2020] 19K56 - Index theory [MSC 2020] 46L80 - K-theory and operator algebras (including cyclic theory) [MSC 2020] 35S35 - Topological aspects for pseudodifferential operators in context of PDEs: intersection cohomology, stratified sets, etc. [MSC 2020]
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9911011778803321

Autore	Mongwe Wilson Tsakane
Titolo	Bayesian Machine Learning in Quantitative Finance : Theory and Practical Applications / / by Wilson Tsakane Mongwe, Rendani Mbuvha, Tshilidzi Marwala
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Palgrave Macmillan, , 2025
ISBN	3-031-88431-0
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (350 pages)
Altri autori (Persone)	MbuvhaRendani MarwalaTshilidzi
Disciplina	332.01519542
Soggetti	Business enterprises - Finance Econometrics Computer science Probabilities Corporate Finance Quantitative Economics Computer Science Probability Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1 Introduction To Bayesian Machine Learning In Quantitative Finance -- 2 Background To Bayesian Machine Learning In Quantitative Finance -- 3 On the Stochastic Alpha Beta Rho Model and Hamiltonian Monte Carlo Techniques -- 4 Learning Equity Volatility Surfaces using Sparse Gaussian Processes -- 5 Analyzing South African Equity Option Prices Using Normalizing Flows -- 6 Sparse and Distributed Gaussian Processes For Modeling Corporate Credit Ratings -- 7 Bayesian Detection Of Recovery On Charged-Off Loan Accounts -- 8 Bayesian Audit Outcome Model Selection Using Normalising Flows -- 9 Bayesian Detection Of Unauthorized Expenditure Using Langevin and Hamiltonian Monte Carlo -- 10 Bayesian Neural Network Inference Of Motor Insurance Claims -- 11 Shadow and Adaptive Hamiltonian Monte Carlo Methods For Calibrating The Nelson and Siegel Model -- 12 Static

and Dynamic Nested Sampling For Yield Curve Model Selection -- 13 A Bayesian Investment Analyst On The Johannesburg Stock Exchange -- 14 Conclusions to Bayesian Machine Learning In Quantitative Finance.

Sommario/riassunto

This book offers a comprehensive discussion of the Bayesian inference framework and demonstrates why this probabilistic approach is ideal for tackling the various modelling problems within quantitative finance. It demonstrates how advanced Bayesian machine learning techniques can be applied within financial engineering, investment portfolio management, insurance, municipal finance management as well as banking. The book covers a broad range of modelling approaches, including Bayesian neural networks, Gaussian processes and Markov Chain Monte Carlo methods. It also discusses the utility of Bayesian inference in quantitative finance and discusses future research goals in the applications of Bayesian machine learning in quantitative finance. Chapters are rooted in the theory of quantitative finance and machine learning while also outlining a range of practical considerations for implementing Bayesian techniques into real-world quantitative finance problems. This book is ideal for graduate researchers and practitioners at the intersection of machine learning and quantitative finance, as well as those working in computational statistics and computer science more broadly. Wilson Tsakane Mongwe is a machine learning research fellow at the University of Johannesburg, South Africa, and an Associate Director and the Head Quantitative Analyst at a Big Four audit firm’s Financial Services Advisory business unit. He is an author of the machine learning book entitled “Hamiltonian Monte Carlo Methods in Machine Learning”. Rendani Mbuvha is Associate Professor of Actuarial Science in the Department of Mathematics at the University of Manchester, UK. He is a fellow of the Institute and Faculty of Actuaries and Co-Founder of AfriClimate AI. He has published extensively in probabilistic inference in machine learning, renewable energy modeling, and computational finance. Tshilidzi Marwala is United Nations Under-Secretary-General and Rector of the UN University. He was the trustee of the Nelson Mandela Foundation and is a member of the American Academy of Arts and Sciences, Chinese Academy of Sciences, The World Academy of Sciences, and the African Academy of Sciences. He has published 27 books in artificial intelligence and related areas.