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Titolo	Measures of Complexity : Festschrift for Alexey Chervonenkis / / edited by Vladimir Vovk, Harris Papadopoulos, Alexander Gammerman
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Disciplina	004
Soggetti	Artificial intelligence Statistics Mathematical statistics Mathematical optimization Artificial Intelligence Statistical Theory and Methods Probability and Statistics in Computer Science Optimization
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Chervonenkis's Recollections -- A Paper That Created Three New Fields -- On the Uniform Convergence of Relative Frequencies of Events to Their Probabilities -- Sketched History: VC Combinatorics, 1826 up to 1975 -- Institute of Control Sciences through the Lens of VC Dimension -- VC Dimension, Fat-Shattering Dimension, Rademacher Averages, and Their Applications -- Around Kolmogorov Complexity: Basic Notions and Results -- Predictive Complexity for Games with Finite Outcome Spaces -- Making Vapnik–Chervonenkis Bounds Accurate -- Comment: Transductive PAC-Bayes Bounds Seen as a Generalization of Vapnik–Chervonenkis Bounds -- Comment: The Two Styles of VC Bounds -- Rejoinder: Making VC Bounds Accurate -- Measures of Complexity in the Theory of Machine Learning -- Classes of Functions Related to VC Properties -- On Martingale Extensions of Vapnik–Chervonenkis -- Theory with Applications to Online Learning

-- Measuring the Capacity of Sets of Functions in the Analysis of ERM -- Algorithmic Statistics Revisited -- Justifying Information-Geometric Causal Inference -- Interpretation of Black-Box Predictive Models -- PAC-Bayes Bounds for Supervised Classification -- Bounding Embeddings of VC Classes into Maximum Classes -- Algorithmic Statistics Revisited -- Justifying Information-Geometric Causal Inference -- Interpretation of Black-Box Predictive Models -- PAC-Bayes Bounds for Supervised Classification -- Bounding Embeddings of VC Classes into Maximum Classes -- Strongly Consistent Detection for Nonparametric Hypotheses -- On the Version Space Compression Set Size and Its Applications -- Lower Bounds for Sparse Coding -- Robust Algorithms via PAC-Bayes and Laplace Distributions -- Postscript: Tragic Death of Alexey Chervonenkis -- Credits -- Index.

Sommario/riassunto

This book brings together historical notes, reviews of research developments, fresh ideas on how to make VC (Vapnik–Chervonenkis) guarantees tighter, and new technical contributions in the areas of machine learning, statistical inference, classification, algorithmic statistics, and pattern recognition. The contributors are leading scientists in domains such as statistics, mathematics, and theoretical computer science, and the book will be of interest to researchers and graduate students in these domains.