

1. Record Nr.	UNINA9910151934203321
Autore	Novak Erich
Titolo	Tractability of Multivariate Problems [[electronic resource]] : Volume I: Linear Information // Erich Novak, Henryk Wozniakowski
Pubbl/distr/stampa	Zuerich, Switzerland, : European Mathematical Society Publishing House, 2008
ISBN	3-03719-526-6
Descrizione fisica	1 online resource (395 pages)
Collana	EMS Tracts in Mathematics (ETM) ; 6
Classificazione	65-xx68-xx
Soggetti	Numerical analysis Mathematical theory of computation Computer science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Multivariate problems occur in many applications. These problems are defined on spaces of d -variate functions and d can be huge - in the hundreds or even in the thousands. Some high-dimensional problems can be solved efficiently to within ϵ , i.e., the cost increases polynomially in $1/\epsilon$ and d . However, there are many multivariate problems for which even the minimal cost increases exponentially in d . This exponential dependence on d is called intractability or the curse of dimensionality. This is the first of a three-volume set comprising a comprehensive study of the tractability of multivariate problems. It is devoted to algorithms using linear information consisting of arbitrary linear functionals. The theory for multivariate problems is developed in various settings: worst case, average case, randomized and probabilistic. A problem is tractable if its minimal cost is not exponential in $1/\epsilon$ and d . There are various notions of tractability, depending on how we measure the lack of exponential dependence. For example, a problem is polynomially tractable if its minimal cost is polynomial in $1/\epsilon$ and d . The study of tractability was initiated about 15 years ago. This is the first research monograph on this subject. Many multivariate problems suffer from the curse of dimensionality when they are defined over classical (unweighted)

spaces. But many practically important problems are solved today for huge d in a reasonable time. One of the most intriguing challenges of theory is to understand why this is possible. Multivariate problems may become tractable if they are defined over weighted spaces with properly decaying weights. In this case, all variables and groups of variables are moderated by weights. The main purpose of this book is to study weighted spaces and to obtain conditions on the weights that are necessary and sufficient to achieve various notions of tractability. The book is of interes...

2. Record Nr.	UNINA9910138981903321
Autore	Pichler Alois
Titolo	Philosophy of the information society : proceedings of the 30. International Ludwig Wittgenstein Symposium, Kirchberg am Wechsel, Austria 2007. Volume 2 // Herbert Hrachovec, Alois Pichler (eds.)
Pubbl/distr/stampa	Frankfurt, : Ontos [s.l.], : Distributed in North and South America by Transaction Publishers, 2008
ISBN	3-11-032848-8
Edizione	[1st ed.]
Descrizione fisica	1 online resource (330 p.)
Collana	Publications of the Austrian Ludwig Wittgenstein Society - New Series ; ; 7 Publications of the Austrian Ludwig Wittgenstein Society ; ; n.s., v. 7
Altri autori (Persone)	HrachovecHerbert PichlerAlois <1966->
Disciplina	100
Soggetti	Information society - Philosophy Information technology - Philosophy
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.
Nota di contenuto	section 1. Philosophy of media = Medienphilosophie -- section 2. Philosophy of the internet = Philosophie des Internets -- section 3. Ethics and political economy of the information society = Ethik und politische Okonomie der Informationsgesellschaft -- section 4. Electronic philosophy resources and open source : open access = Elektronische Philosophie-Ressourcen und Open Source : Open Access.

Sommario/riassunto

This is the second of two volumes of the proceedings from the 30th International Wittgenstein Symposium in Kirchberg, August 2007. It contains selected contributions on the Philosophy of media, Philosophy of the Internet, on Ethics and the political economy of information society. Also included are papers presented in a workshop on electronic philosophy resources and open source/open access.
