

1. Record Nr.	UNINA9910437882903321
Autore	Diniz Paulo S. R
Titolo	Adaptive Filtering : Algorithms and Practical Implementation // by Paulo S. R. Diniz
Pubbl/distr/stampa	New York, NY : , : Springer US : , : Imprint : Springer, , 2013
ISBN	1-4614-4106-4
Edizione	[4th ed. 2013.]
Descrizione fisica	1 online resource (661 p.)
Disciplina	621.3822
Soggetti	Signal processing Image processing Speech processing systems Electronic circuits Electrical engineering Automatic control Signal, Image and Speech Processing Circuits and Systems Communications Engineering, Networks Electrical Engineering Control and Systems Theory
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 and index.
Nota di contenuto	Introduction to Adaptive Filtering -- Fundamentals of Adaptive Filtering -- The Least-Mean-Square (LMS) Algorithm -- LMS-Based Algorithms -- Conventional RLS Adaptive Filter -- Data-Selective Adaptive Filtering -- Adaptive Lattice-Based RLS Algorithms -- Fast Transversal RLS Algorithms -- QR-Decomposition-Based RLS Filters -- Adaptive IIR Filters -- Nonlinear Adaptive Filtering -- Subband Adaptive Filters -- Blind Adaptive Filtering.
Sommario/riassunto	In the fourth edition of Adaptive Filtering: Algorithms and Practical Implementation, author Paulo S.R. Diniz presents the basic concepts of adaptive signal processing and adaptive filtering in a concise and straightforward manner. The main classes of adaptive filtering algorithms are presented in a unified framework, using clear notations

that facilitate actual implementation. The main algorithms are described in tables, which are detailed enough to allow the reader to verify the covered concepts. Many examples address problems drawn from actual applications. New material to this edition includes: Analytical and simulation examples in Chapters 4, 5, 6 and 10 Appendix E, which summarizes the analysis of set-membership algorithm Updated problems and references Providing a concise background on adaptive filtering, this book covers the family of LMS, affine projection, RLS and data-selective set-membership algorithms as well as nonlinear, sub-band, blind, IIR adaptive filtering, and more. Several problems are included at the end of chapters, and some of these problems address applications. A user-friendly MATLAB package is provided where the reader can easily solve new problems and test algorithms in a quick manner. Additionally, the book provides easy access to working algorithms for practicing engineers.
