1. Record Nr. UNINA9910478868203321 Autore Olivier J. C (Jan Corne) Titolo Linear systems and signals : a primer / / JC Olivier Pubbl/distr/stampa Norwood, Massachusetts:,: Artech House,, [2019] [Piscatagay, New Jersey]:,: IEEE Xplore,, [2018] **ISBN** 1-63081-615-9 Descrizione fisica 1 online resource (304 pages) Artech House radar series Collana Disciplina 621.3822 Soggetti Signal processing - Mathematics Linear time invariant systems Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes index. Note generali Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto This new resource covers a wide range of content by focusing on theorems and examples to explain key concepts of signals and linear systems theory in fewer than 300 pages. Readers will learn how to compute the impulse response of an electronic circuit, design a filter in the presence of colored noise, and use the Z transform to design a digital filter. The book covers transform theory and statespace analysis and design. Stochastic systems and signals, a topic that has become important recently with the advent of renewable energy, is also presented. The Ergodic theorem is discussed in detail, with specific, real world examples of its application to renewable power and energy systems as well as signal processing systems. The book also provides a self-contained introduction to the theory of probability. Written for the practicing engineer and the student new to the subject, this comprehensive guide includes links to literature and online resources for the reader who wants additional information. In addition to numerous worked examples, this primer includes MATLABª

source code to assist readers with their projects in the field.