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Sommario/riassunto

System identification is a general term used to describe mathematical tools and algorithms that build dynamical models from measured data. Used for prediction, control, physical interpretation, and the designing of any electrical systems, they are vital in the fields of electrical, mechanical, civil, and chemical engineering.Focusing mainly on frequency domain techniques, System Identification: A Frequency Domain Approach, Second Edition also studies in detail the similarities and differences with the classical time domain approach. It high??lights many of the important steps in the identification process, points out the possible pitfalls to the reader, and illustrates the powerful tools that are available.Readers of this Second Editon will benefit from:. MATLAB software support for identifying multivariable systems that is freely available at the website http://booksupport.wiley.com. State-of-the-art system identification methods for both time and frequency domain data. New chapters on non-parametric and parametric transfer function modeling using (non-)period excitations. Numerous examples and figures that facilitate the learning process. A simple writing style that allows the reader to learn more about the theo??retical aspects of the proofs and algorithmsUnlike other books in this field, System Identification, Second Edition is ideal for practicing engineers, scientists, researchers, and both master's and PhD students in electrical, mechanical, civil, and chemical engineering.