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Sommario/riassunto

A comprehensive and detailed treatment of the program SIMULINK(R) that focuses on SIMULINK(R) for simulations in Digital and Wireless Communications Modeling of Digital Communication Systems Using SIMULINK(R) introduces the reader to SIMULINK(R), an extension of the widely-used MATLAB modeling tool, and the use of SIMULINK(R) in modeling and simulating digital communication systems, including wireless communication systems. Readers will learn to model a wide selection of digital communications techniques and evaluate their performance for many important channel conditions. Modeling of Digital Communication Systems Using SIMULINK(R) is organized in two parts. The first addresses address Simulink(R) models of digital communications systems using various modulation, coding, channel conditions and receiver processing techniques. The second part provides a collection of examples, including speech coding, interference cancellation, spread spectrum, adaptive signal processing, Kalman filtering and modulation and coding techniques currently implemented in 4G wireless systems. . Covers case examples, progressing from basic to complex. Provides applications for 4G mobile

communications, satellite communications, and fixed wireless systems that reveal the power of SIMULINK modeling. Includes access to useable SIMULINK(R) simulations online Covering both the use of SIMULINK(R) in digital communications and the complex aspects of wireless communication systems, Modeling of Digital Communication Systems UsingSIMULINK(R) is a great resource for both practicing engineers and students with MATLAB experience. Arthur Giordano, PhD, is a consultant in the field of military and commercial communications specializing in wireless communications. He is a co-founder of G5 Scientific, LLC, is a senior member of the IEEE and has taught graduate communications courses. He has developed numerous models using MathWorks(R)' SIMULINK(R)(R) to characterize digital communications systems. Allen Levesque, PhD, / is a consultant specializing in digital communications systems, and is a partner in G5 Scientific, LLC. He has taught graduate courses in digital communications at Worcester Polytechnic Institute and is currently a Research Scientist in WPI's Center for Wireless Information Network Studies. Dr. Levesque is an elected Fellow of the IEEE. / .