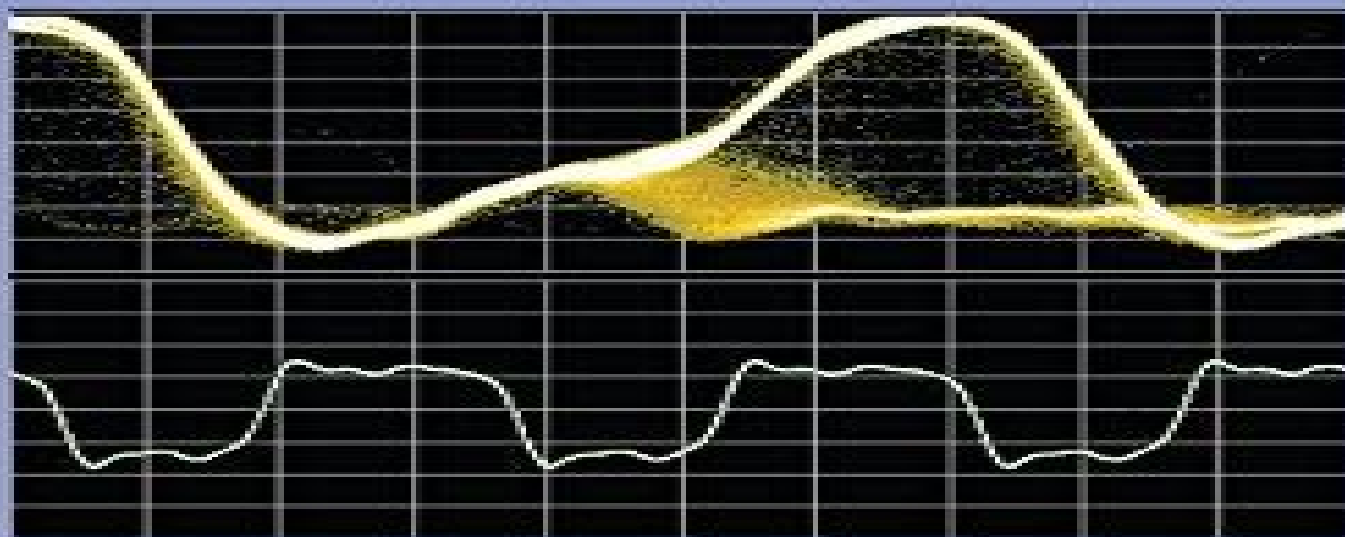


# Digital Communication Systems Using MATLAB® and Simulink®

*Second Edition*



**Dennis Silage**

# Digital Communication Systems Using Matlab And Simulink

**Dac-Nhuong Le, Abhishek Kumar  
Pandey, Sairam Tadepalli, Pramod  
Singh Rathore, Jyotir Moy Chatterjee**

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## **MATLAB und SIMULINK in Signalverarbeitung und Kommunikationstechnik** Josef Hoffmann,1999

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 IEEE STANDARD 802 11A 1999 388      Optical Fiber Communication Systems with MATLAB® and Simulink® Models,  
 Second Edition Le Nguyen Binh, 2014-12-01 Carefully structured to instill practical knowledge of fundamental issues Optical  
 Fiber Communication Systems with MATLAB and Simulink Models describes the modeling of optically amplified fiber  
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 already taken courses in electromagnetic theory signal processing and digital communications as well as to optical engineers  
 designers and practitioners in industry      *MATLAB/Simulink for Digital Communication* ,2009      **Digital Signal**

**Processing with Matlab Examples, Volume 1** Jose Maria Giron-Sierra, 2016-11-19 This is the first volume in a trilogy on modern Signal Processing The three books provide a concise exposition of signal processing topics and a guide to support individual practical exploration based on MATLAB programs This book includes MATLAB codes to illustrate each of the main steps of the theory offering a self contained guide suitable for independent study The code is embedded in the text helping readers to put into practice the ideas and methods discussed The book is divided into three parts the first of which introduces readers to periodic and non periodic signals The second part is devoted to filtering which is an important and commonly used application The third part addresses more advanced topics including the analysis of real world non stationary signals and data e g structural fatigue earthquakes electro encephalograms birdsong etc The book s last chapter focuses on modulation an example of the intentional use of non stationary signals      Spektrale Analyse mit MATLAB und Simulink Josef Hoffmann, 2011-12-02 Die Spektrale Analyse von Signalen ist ein wichtiger Bestandteil der Signalverarbeitung MATLAB und Simulink sind ideale Instrumente zur computergestützten Spektralanalyse Zu den verschiedensten Signalen werden hier Herangehensweisen zur Analyse beschrieben und jeweils durch einige Experimente veranschaulicht Die Beispiele stammen aus Kommunikationstechnik Elektrotechnik und Mechanischer Schwingungstechnik      **Digital Communication Systems Engineering with Software-defined Radio** Alexander M. Wyglinski, Di Pu, 2013 For a senior level undergraduate course on digital communications this unique resource provides you with a practical approach to quickly learning the software defined radio concepts you need to know for your work in the field      *Network Modeling, Simulation and Analysis in MATLAB* Dac-Nhuong Le, Abhishek Kumar Pandey, Sairam Tadepalli, Pramod Singh Rathore, Jyotir Moy Chatterjee, 2019-08-06 The purpose of this book is first to study MATLAB programming concepts then the basic concepts of modeling and simulation analysis particularly focus on digital communication simulation The book will cover the topics practically to describe network routing simulation using MATLAB tool It will cover the dimensions like Wireless network and WSN simulation using MATLAB then depict the modeling and simulation of vehicles power network in detail along with considering different case studies Key features of the book include Discusses different basics and advanced methodology with their fundamental concepts of exploration and exploitation in NETWORK SIMULATION Elaborates practice questions and simulations in MATLAB Student friendly and Concise Useful for UG and PG level research scholar Aimed at Practical approach for network simulation with more programs with step by step comments Based on the Latest technologies coverage of wireless simulation and WSN concepts and implementations      **Grundlagen der digitalen Informationsübertragung** Peter Adam Höher, 2013-05-23 Die Informations und Kommunikationstechnik hat in den letzten Jahrzehnten enorm an Bedeutung gewonnen Umso wichtiger wird die Vermittlung von Grundlagenwissen in der digitalen Informationsübertragung Aktuelle Forschungsgebiete wie Mehrantennensysteme MIMO Systeme Mehrnutzerkommunikation und Netzwerkcodierung basieren auf informationstheoretischen Ansätzen aber auch auf Kenntnissen der Codierungstheorie der Übertragungstechnik und der Sch

tzverfahren Im Vordergrund dieses Lehrbuchs stehen leistungsfähige drahtlose Übertragungstechniken unter besonderer Berücksichtigung des Mobilfunks Die meisten Prinzipien und Verfahren sind aber auch in anderen Bereichen der digitalen Übertragungstechnik und verwandten Gebieten anwendbar Durch Querverweise wird ein Zusammenhang zwischen den Teilbereichen hergestellt und der Leser somit in die Lage versetzt die wesentlichen Facetten der digitalen Informationsübertragung ganzheitlich zu erfassen In der vollständig bearbeiteten und erweiterten 2. Auflage wurden aufstrebende Themen wie Netzwerkcodierung, ratenlose Codierung, Compressed Sensing, Ultra-Breitbandkommunikation, Software Defined Radio und Cognitive Radio neuer Berücksichtigung Aktuelle Themen wie Mehrnutzer Informationstheorie, Rate Distortion Theorie, LDPC Codes, iterative Decodierverfahren und zugehörige Analysemethoden, Superpositionsmodulation, Mehrträgerverfahren, Mehrantennensystem und Interferenzunterdrückung wurden vertiefend behandelt

**Contemporary Communication**

**Systems Using MATLAB and Simulink** John G. Proakis, Masoud Salehi, Gerhard Bauch, 2004 Featuring a variety of applications that motivate students, this book serves as a companion or supplement to any of the comprehensive textbooks in communication systems The book provides a variety of exercises that may be solved on the computer using MATLAB The authors assume that the student is familiar with the fundamentals of MATLAB By design, the treatment of the various topics is brief The authors provide the motivation and a short introduction to each topic, establish the necessary notation, and then illustrate the basic concepts by means of an example

**Problem-Based Learning in Communication Systems Using**

**MATLAB and Simulink** Elliott Edling, 2017-05-03 This book covers the basic concepts of signals and analog and digital communications to more complex simulations in communication systems Problem Based Learning in Communication Systems Using MATLAB and Simulink begins by introducing MATLAB and Simulink to prepare readers who are unfamiliar with these environments in order to tackle projects and exercises included in this book Discussions on simulation of signals, filter design, sampling and reconstruction, and analog communications are covered next The book concludes by covering advanced topics such as Viterbi decoding, OFDM, and MIMO In addition, this book contains examples of how to convert waveforms constructed in simulation into electric signals It also includes problems illustrating how to complete actual wireless communications in the band near ultrasonic frequencies

**Contemporary Communication Systems Using MATLAB** John G.

Proakis, Masoud Salehi, 1998 This text contains a large number of MATLAB based problems dealing with topics covered in a first course in communication systems Each chapter contains fundamental concepts briefly reviewed and presents illustrative problems using MATLAB Each chapter contains a list of MATLAB files used

**Problem-Based Learning in**

**Communication Systems Using MATLAB and Simulink** Jesus Jean, 2017-05-16 This book covers the basic concepts of signals and analog and digital communications to more complex simulations in communication systems Problem Based Learning in Communication Systems Using MATLAB and Simulink begins by introducing MATLAB and Simulink to prepare readers who are unfamiliar with these environments in order to tackle projects and exercises included in this book



Discussions on simulation of signals filter design sampling and reconstruction and analog communications are covered next. The book concludes by covering advanced topics such as Viterbi decoding OFDM and MIMO. In addition, this book contains examples of how to convert waveforms constructed in simulation into electric signals. It also includes problems illustrating how to complete actual wireless communications in the band near ultrasonic frequencies. Advances in Computer Science, Environment, Ecoinformatics, and Education, Part V Sally Lin, Xiong Huang, 2011-08-09. This 5 volume set CCIS 214 CCIS 218 constitutes the refereed proceedings of the International Conference on Computer Science Environment Ecoinformatics and Education CSEE 2011 held in Wuhan, China, in July 2011. The 525 revised full papers presented in the five volumes were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on: information security, intelligent information, neural networks, digital library, algorithms, automation, artificial intelligence, bioinformatics, computer networks, computational system, computer vision, computer modelling and simulation, control, databases, data mining, e-learning, e-commerce, e-business, image processing, information systems, knowledge management and knowledge discovering, multimedia and its application, management and information system, mobile computing, natural computing and computational intelligence, open and innovative education, pattern recognition, parallel and computing, robotics, wireless network, web application, other topics connecting with computer environment and ecoinformatics, modeling and simulation, environment restoration, environment and energy, information and its influence on environment, computer and ecoinformatics, biotechnology and biofuel, as well as biosensors and bioreactor.

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