1. Record Nr. UNINA9910544848203321

Autore	Bernal Miguel
Titolo	Analysis and Synthesis of Nonlinear Control Systems : A Convex Optimisation Approach / / by Miguel Bernal, Antonio Sala, Zsófia Lendek, Thierry Marie Guerra
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783030907730 3030907732
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (349 pages)
Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 408
Disciplina	629.8312 629.836
Soggetti	Automatic control Mathematical optimization System theory Control theory Robust statistics Control and Systems Theory Optimization Systems Theory, Control System Robustness
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- Problems to be Solved and Scope of the Book -- Modeling via Convex Structures -- Stability Analysis -- State Feedback -- Performance, Robustness, Observation, and Output Feedback -- Conclusions and Perspectives.
Sommario/riassunto	This book presents a modern perspective on the modelling, analysis, and synthesis ideas behind convex-optimisation-based control of nonlinear systems: it embeds them in models with convex structures. Analysis and Synthesis of Nonlinear Control Systems begins with an introduction to the topic and a discussion of the problems to be solved. It then explores modelling via convex structures, including quasi-linear

	parameter-varying, Takagi–Sugeno models, and linear fractional transformation structures. The authors cover stability analysis, addressing Lyapunov functions and the stability of polynomial models, as well as the performance and robustness of the models. With detailed examples, simulations, and programming code, this book will be useful to instructors, researchers, and graduate students interested in nonlinear control systems.

2.

Record Nr.	UNINA9911019519203321
Autore	Murthy D. N. P
Titolo	Weibull models / / D.N. Prabhakar Murthy, Min Xie, Renyan Jiang
Pubbl/distr/stampa	Hoboken, N.J., : J. Wiley, c2004
ISBN	9786610344468 9781280344466 1280344466 9780470252338 0470252332 9780471473275 0471473278 9780471473268 047147326X
Descrizione fisica	1 online resource (409 p.)
Collana	Wiley series in probability and statistics
Altri autori (Persone)	XieM (Min) JiangRenyan <1956->
Disciplina	519.2/4
Soggetti	Weibull distribution
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	Weibull Models; Contents; Preface; PART A OVERVIEW; Chapter 1 Overview; 1.1 Introduction; 1.2 Illustrative Problems; 1.3 Empirical Modeling Methodology; 1.4 Weibull Models; 1.5 Weibull Model Selection; 1.6 Applications of Weibull Models; 1.7 Outline of the Book; 1.8 Notes; Exercises; Chapter 2 Taxonomy for Weibull Models; 2.1

Introduction; 2.2 Taxonomy for Weibull Models; 2.3 Type I Models: Transformation of Weibull Variable; 2.4 Type II Models: Modification/Generalization of Weibull Distribution; 2.5 Type III Models: Models Involving Two or More Distributions
2.6 Type IV Models: Weibull Models with Varying Parameters2.7 Type V Models: Discrete Weibull Models; 2.8 Type VI Models: Multivariate Weibull Models; 2.9 Type VII Models: Stochastic Point Process Models; Exercises; PART B BASIC WEIBULL MODEL; Chapter 3 Model Analysis; 3.1 Introduction; 3.2 Basic Concepts; 3.3 Standard Weibull Model; 3.4 Three-Parameter Weibull Model; 3.5 Notes; Exercises; Chapter 4 Parameter Estimation; 4.1 Introduction; 4.2 Data Types; 4.3 Estimation: An Overview; 4.4 Estimation Methods and Estimators; 4.5 Two-Parameter Weibull Model: Graphical Methods
4.6 Standard Weibull Model: Statistical Methods4.7 Three-Parameter Weibull Model; Exercises; Chapter 5 Model Selection and Validation; 5.1 Introduction; 5.2 Graphical Methods; 5.3 Goodness-of-Fit Tests; 5.4 Model Discrimination; 5.5 Model Validation; 5.6 Two-Parameter Weibull Model; 5.7 Three-Parameter Weibull Model; Exercises; PART C TYPES I AND II MODELS; Chapter 6 Type I Weibull Models; 6.1 Introduction; 6.2 Model I(a)-3: Reflected Weibull Distribution; 6.3 Model I(a)-4: Double Weibull Distribution; 6.4 Model I(b)-1: Power Law Transformation; 6.5 Model I(b)-2: Log Weibull Transformation
6.6 Model I(b)-3: Inverse Weibull DistributionExercises; Chapter 7 Type II Weibull Models; 7.1 Introduction; 7.2 Model II(a)-1: Pseudo-Weibull Distribution; 7.3 Model II(a)-2: Stacy-Mihram Model; 7.4 Model II(b)-1: Extended Weibull Distribution; 7.5 Model II(b)-2: Exponentiated Weibull Distribution; 7.6 Model II(b)-3: Modified Weibull Distribution; 7.7 Models II(b)4-6: Generalized Weibull Family; 7.8 Model II(b)-7: Three-Parameter Generalized Gamma; 7.9 Model II(b)-8: Extended Generalized Gamma; 7.10 Models II(b)9-10: Four- and Five-Parameter Weibulls
7.11 Model II(b)-11: Truncated Weibull Distribution7.12 Model II(b)-12: Slymen-Lachenbruch Distributions; 7.13 Model II(b)-13: Weibull Extension; Exercises; PART D TYPE III MODELS; Chapter 8 Type III(a) Weibull Models; 8.1 Introduction; 8.2 Model III(a)-1: Weibull Mixture Model; 8.3 Model III(a)-2: Inverse Weibull Mixture Model; 8.4 Model III (a)-3: Hybrid Weibull Mixture Models; 8.5 Notes; Exercises; Chapter 9 Type III(b) Weibull Models; 9.1 Introduction; 9.2 Model III(b)-1: Weibull Competing Risk Model; 9.3 Model III(b)-2: Inverse Weibull Competing Risk Model
9.4 Model III(b)-3: Hybrid Weibull Competing Risk Model

Sommario/riassunto

A comprehensive perspective on Weibull models The literature on Weibull models is vast, disjointed, and scattered across many different journals. Weibull Models is a comprehensive guide that integrates all the different facets of Weibull models in a single volume. This book will be of great help to practitioners in reliability and other disciplines in the context of modeling data sets using Weibull models. For researchers interested in these modeling techniques, exercises at the end of each chapter define potential topics for future research. Organized into seven distinct parts, Weibull