

1. Record Nr.	UNISA996386646403316
Autore	Agrippa von Nettesheim Heinrich Cornelius <1486?-1535.>
Titolo	Female pre-eminence, or, The dignity and excellency of that sex above the male [[electronic resource]] : an ingenious discourse / / written originally in Latine by Henry Cornelius Agrippa ... ; done into English with additional advantages by H. C
Pubbl/distr/stampa	London, : Printed by T. R. and M. D. and are to be sold by Henry Million ..., 1670
Descrizione fisica	[22], 83 p
Altri autori (Persone)	CareHenry <1646-1688.>
Soggetti	Women
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Reproduction of original in Huntington Library.
Sommario/riassunto	eebo-0113

2. Record Nr.	UNINA9910960440903321
Autore	Mareels Iven
Titolo	Adaptive Systems : An Introduction // by Iven Mareels, Jan Willem Polderman
Pubbl/distr/stampa	Boston, MA : , : Birkhäuser Boston : , : Imprint : Birkhäuser, , 1996
ISBN	0-8176-8142-6
Edizione	[1st ed. 1996.]
Descrizione fisica	1 online resource (XVII, 342 p.)
Collana	Systems & Control: Foundations & Applications, , 2324-9757
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Soggetti	System theory Control theory Mathematical models Probabilities Systems Theory, Control Mathematical Modeling and Industrial Mathematics Probability Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Adaptive Systems -- 1.1 Introduction -- 1.2 Adaptive systems: examples -- 1.3 General structure of adaptive control systems -- 1.4 Illustrating the concepts -- 1.5 Summary of chapter -- 1.6 Notes and references -- 1.7 Exercises -- 2 Systems And Their Representations -- 2.1 Introduction -- 2.2 Notation -- 2.3 The behavior -- 2.4 Latent variables -- 2.5 Equivalent representations -- 2.6 Controllability -- 2.7 Observability -- 2.8 Stability -- 2.9 Elimination of Latent variables -- 2.10 The ring $\mathbb{R}[s]$ -- 2.11 An example -- 2.12 A word about the notation -- 2.13 Summary of chapter -- 2.14 Notes and references -- 3 Adaptive systems : principles of identification -- 3.1 Introduction -- 3.2 Object of interest and model class -- 3.3 Identification criterion and algorithms -- 3.4 Data model assumptions -- 3.5 Analysis of identification algorithms -- 3.6 Persistency of excitation -- 3.7 Summary of chapter -- 3.8 Notes and references -- 3.9 Exercises -- 4 Adaptive Pole Assignment -- 4.1 Introduction -- 4.2 Preliminaries -- 4.3 The system and its representations -- 4.4 Equilibrium analysis -- 4.5 An algorithm for adaptive pole assignment -- 4.6 Analysis of the

algorithm -- 4.7 Filtered signals -- 4.8 Modification of the projection algorithm -- 4.9 Summary of chapter -- 4.10 Notes and references -- 4.11 Exercises -- 5 Direct Adaptive Model Reference Control -- 5.1 Introduction -- 5.2 Basic problem definition -- 5.3 Model reference control: nonadaptive solution -- 5.4 Error model construction -- 5.5 Equilibrium analysis -- 5.6 Adaptive algorithm -- 5.7 Analysis of the adaptive system -- 5.8 Adaptive model reference control with disturbance rejection -- 5.9 Summary of chapter -- 5.10 Notes and references -- 5.11 Exercises -- 6 Universal Controllers -- 6.1 Introduction -- 6.2 Existence of solutions -- 6.3 The first order case -- 6.4 Higher order systems -- 6.5 Mårtensson's algorithm -- 6.6 Summary of chapter -- 6.7 Notes and references -- 6.8 Exercises -- 7 The pole/zero cancellation problem -- 7.1 Introduction -- 7.2 The pole/zero cancellation problem in adaptive control -- 7.3 Combining direct and indirect adaptive control -- 7.4 Adaptive Excitation -- 7.5 A more fundamental viewpoint -- 7.6 Conclusions -- 7.7 Summary of chapter -- 7.8 Notes and references -- 7.9 Exercises -- 8 Averaging Analysis For Adaptive Systems -- 8.1 Introduction -- 8.2 Averaging -- 8.3 Transforming an adaptive system into standard form -- 8.4 Averaging approximation -- 8.5 Application: the MIT rule for adaptive control -- 8.6 Application: echo cancellation in telephony -- 8.7 Summary of chapter -- 8.8 Notes and references -- 8.9 Exercises -- 9 Dynamics of adaptive systems: A case study -- 9.1 Introduction -- 9.2 The example -- 9.3 Global analysis and bifurcations -- 9.4 Adaptive system behavior: ideal case -- 9.5 Adaptive system behavior: undermodelled case -- 9.6 Discussion -- 9.7 Summary of chapter -- 9.8 Notes and References -- 9.9 Exercises -- Epilogue -- A Background material -- A.1 A contraction result -- A.2 The Comparison Principle -- A.2.1 Bellman-Gronwall Lemma -- A.2.2 Perturbed linear stable systems -- A.3 Miscellaneous stability results -- A.3.1 Stability Definitions -- A.3.2 Some Lyapunov stability results -- A.4 Detectability -- A.5 An inequality for linear systems -- A.6 Finite horizon averaging result -- A.7 Maple code for solving Lyapunov equations -- A.8 Maple code for fixed points and two periodic solutions.

Sommario/riassunto

Loosely speaking, adaptive systems are designed to deal with, to adapt to, changing environmental conditions whilst maintaining performance objectives. Over the years, the theory of adaptive systems evolved from relatively simple and intuitive concepts to a complex multifaceted theory dealing with stochastic, nonlinear and infinite dimensional systems. This book provides a first introduction to the theory of adaptive systems. The book grew out of a graduate course that the authors taught several times in Australia, Belgium, and The Netherlands for students with an engineering and/or mathematics background. When we taught the course for the first time, we felt that there was a need for a textbook that would introduce the reader to the main aspects of adaptation with emphasis on clarity of presentation and precision rather than on comprehensiveness. The present book tries to serve this need. We expect that the reader will have taken a basic course in linear algebra and multivariable calculus. Apart from the basic concepts borrowed from these areas of mathematics, the book is intended to be self contained.