Título: Numerical Solution Of Algebraic Riccati Equations

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Sinopsis

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This concise and comprehensive treatment of the basic theory of algebraic Riccati equations describes the classical as well as the more advanced algorithms for their solution in a manner that is accessible to both practitioners and scholars. It is the first book in which nonsymmetric algebraic Riccati equations are treated in a clear and systematic way. Some proofs of theoretical results have been simplified and a unified notation has been adopted.

Readers will find
? a unified discussion of doubling algorithms, which are effective in solving algebraic Riccati equations.
? a detailed description of all classical and advanced algorithms for solving algebraic Riccati equations and their MATLAB® codes. This will help the reader gain an understanding of the computational issues and provide ready-to-use implementation of the different solution techniques.

Audience
This book is intended for researchers who work in the design and analysis of algorithms and for practitioners who are solving problems in applications and need to understand the available algorithms and software. It is also intended for students with no expertise in this area who wish to approach this subject from a theoretical or computational point of view. The book can be used in a semester course on algebraic Riccati equations or as a reference in a course on advanced numerical linear algebra and applications.

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Contents
Preface
Index