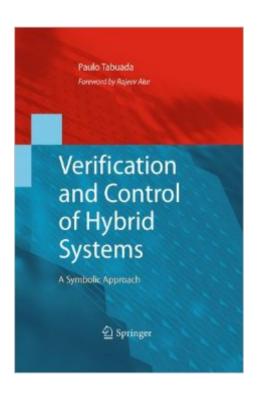
The book was found

Verification And Control Of Hybrid Systems: A Symbolic Approach





Synopsis

Hybrid systems describe the interaction of software, described by finite models such as finite-state machines, with the physical world, described by infinite models such as differential equations. This book addresses problems of verification and controller synthesis for hybrid systems. Although these problems are very difficult to solve for general hybrid systems, several authors have identified classes of hybrid systems that admit symbolic or finite models. The novelty of the book lies on the systematic presentation of these classes of hybrid systems along with the relationships between the hybrid systems and the corresponding symbolic models. To show how the existence of symbolic models can be used for verification and controller synthesis, the book also outlines several key results for the verification and controller design of finite systems. Several examples illustrate the different methods and techniques discussed in the book.

Book Information

Hardcover: 202 pages

Publisher: Springer; 2009 edition (June 15, 2009)

Language: English

ISBN-10: 1441902236

ISBN-13: 978-1441902238

Product Dimensions: 6.1 x 0.6 x 9.2 inches

Shipping Weight: 1 pounds

Average Customer Review: 4.5 out of 5 stars Â See all reviews (2 customer reviews)

Best Sellers Rank: #843,732 in Books (See Top 100 in Books) #54 in Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > Control Systems #233 in Books > Science & Math > Physics > System Theory #394 in Books > Science & Math >

Mathematics > Pure Mathematics > Logic

Customer Reviews

I'm a PhD student in the area of control theory, I was so curious about simulation, and bisimulation relations and how they apply to verification and control of hybrid systems. It gave me a very good understanding of these notions together with information on where the literature is in the computer science part of hybrid systems. I actually did not buy it, I lent it from the library. I don't think it is available online for everyone, it is available only for those universities which have bought springer publications. I just came here to appreciate the endeavour Paulo Tabuada has put on this book to make it as clear as possible to all readers, even those who are not very familiar with the background

and notions in the field like me.

I'm sad that I didn't notice that the entire book is available on-line for free (from the publisher even). I'd like to support the author, but I'm not sure I want to spend \$80 on this book when I don't have to.

Download to continue reading...

Verification and Control of Hybrid Systems: A Symbolic Approach Show Networks and Control Systems: Formerly "Control Systems for Live Entertainment" Systems and Software Verification: Model-Checking Techniques and Tools Verification and Validation of Modern Software-Intensive Systems Hybrid and Alternative Fuel Vehicles (4th Edition) (Automotive Systems Books) Control Self-Assessment: Reengineering Internal Control (Enterprise Governance, Control, Audit, Security, Risk Management and Business Continuity) Software Verification and Validation for Practitioners and Managers, Second Edition The Bible: 16 Symbolic Teachings Every Christian Needs to Study on Life with the Holy Book and Jesus Christ Artificial Intelligence with Common Lisp: Fundamentals of Symbolic and Numeric Processing Verification of Computer Codes in Computational Science and Engineering Logic Design and Verification Using SystemVerilog (Revised) Software Verification and Validation: A Practitioner's Guide (Artech House Computer Library (Hardcover)) Calculus: From Graphical, Numerical, and Symbolic Points of View, Volume 2 Calculus from Graphical, Numerical, and Symbolic Points of View Talking Prices: Symbolic Meanings of Prices on the Market for Contemporary Art (Princeton Studies in Cultural Sociology) Common LISP: A Gentle Introduction to Symbolic Computation (Dover Books on Engineering) Modern Logic: A Text in Elementary Symbolic Logic Formal Verification: An Essential Toolkit for Modern VLSI Design Understanding Symbolic Logic (5th Edition) Biometrics: Advanced Identity Verification: The Complete Guide

Dmca