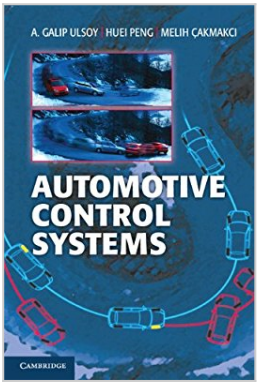

Automotive Control Systems

By A. Galip Ulsoy, Huei Peng, Melih Çakmakci

Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci

This engineering textbook is designed to introduce advanced control systems for vehicles, including advanced automotive concepts and the next generation of vehicles for ITS. For each automotive control problem considered, the authors emphasise the physics and underlying principles behind the control system concept and design. This is an exciting and rapidly developing field for which many articles and reports exist but no modern unifying text. An extensive list of references is provided at the end of each chapter for all the topics covered. It is currently the only textbook, including problems and examples, that covers and integrates the topics of automotive powertrain control, vehicle control, and intelligent transportation systems. The emphasis is on fundamental concepts and methods for automotive control systems, rather than the rapidly changing specific technologies. Many of the text examples, as well as the end-of-chapter problems, require the use of MATLAB and/or SIMULINK.

Automotive Control Systems

By A. Galip Ulsoy, Huei Peng, Melih Çakmakci

Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci

This engineering textbook is designed to introduce advanced control systems for vehicles, including advanced automotive concepts and the next generation of vehicles for ITS. For each automotive control problem considered, the authors emphasise the physics and underlying principles behind the control system concept and design. This is an exciting and rapidly developing field for which many articles and reports exist but no modern unifying text. An extensive list of references is provided at the end of each chapter for all the topics covered. It is currently the only textbook, including problems and examples, that covers and integrates the topics of automotive powertrain control, vehicle control, and intelligent transportation systems. The emphasis is on fundamental concepts and methods for automotive control systems, rather than the rapidly changing specific technologies. Many of the text examples, as well as the end-of-chapter problems, require the use of MATLAB and/or SIMULINK.

Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci Bibliography

- Sales Rank: #1474652 in eBooks
- Published on: 2012-04-30
- Released on: 2012-04-30
- Format: Kindle eBook

Editorial Review

About the Author
A. Galip Ulsoy is the C. D. Mote, Jr Distinguished University Professor, the William Clay Ford Professor of Manufacturing and the Deputy Director of the Ground Robotics Reliability Center and the Engineering Research Center for Reconfigurable Manufacturing Systems. He has been on the faculty of the Department of Mechanical Engineering at the University of Michigan since 1980 and was the founding Director of the Program in Manufacturing. He served as the Technical Editor of the ASME Journal of Dynamic Systems Measurement and Control and the IEEE/ASME Transactions on Mechatronics and is a member of the editorial board of Mechanical Systems and Signal Processing and several other international journals. Ulsoy is a member of the National Academy of Engineering, a Fellow of the American Society of Mechanical Engineers, the International Federation of Automatic Control and the Society of Manufacturing Engineers, a Senior Member of the IEEE, and a member of several other professional and honorary organizations. He is the past President of the American Automatic Control Council. He is the co-author, with Warren R. DeVries, of Microcomputer Applications in Manufacturing and a co-author of Time Delay Systems. He has published more than 300 refereed technical articles in journals, conference proceedings and books.

Huei Peng is a Professor in the Department of Mechanical Engineering at the University of Michigan. He is also the Executive Director of Interdisciplinary and Professional Engineering Programs. His research interests include vehicle dynamics and control, electromechanical systems, optimal control, human driver modeling, vehicle active safety systems, control of hybrid and fuel cell vehicles, energy system design and control for mobile robots. He holds numerous awards and honors, including the Chang-Jiang Scholar Award, Tsinghua University; the Outstanding Achievement Award, ME Department, University of Michigan (2005); the Best Paper Award, 7th International Symposium on Advanced Vehicle Control (2004) and the CAREER Award, National Science Foundation (1998-2002) and he is a 2008 Fellow of the ASME. He has published more than 200 refereed technical articles in journals, conference proceedings and books. He is the co-editor of Advanced Automotive Technologies with J. S. Freeman and author of Control of Fuel Cell Power Systems: Principles, Modeling, Analysis and Feedback Design.

Melih Cakmakci is a Professor of Mechanical Engineering at Bilkent University. His research areas include modeling, analysis and control of dynamic systems, control systems, smart mechatronics, modeling of manufacturing systems and their control, automotive control systems, optimal energy management algorithms and design and analysis of network control systems. Dr Cakmakci worked on the notes for this work while teaching at the University of Michigan and completing his PhD. Prior to joining Bilkent University, he worked at Ford Scientific Research Center as a senior engineer.

Users Review

From reader reviews:

Natalie White:

Book is definitely written, printed, or illustrated for everything. You can understand everything you want by a guide. Book has a different type. As you may know that book is important matter to bring us around the world. Alongside that you can your reading expertise was fluently. A book Automotive Control Systems will make you to always be smarter. You can feel much more confidence if you can know about almost

everything. But some of you think in which open or reading a book make you bored. It isn't make you fun. Why they are often thought like that? Have you trying to find best book or suited book with you?

Elizabeth Jamerson:

Do you considered one of people who can't read satisfying if the sentence chained inside straightway, hold on guys this kind of aren't like that. This Automotive Control Systems book is readable simply by you who hate the straight word style. You will find the information here are arrange for enjoyable reading through experience without leaving actually decrease the knowledge that want to supply to you. The writer associated with Automotive Control Systems content conveys the thought easily to understand by many individuals. The printed and e-book are not different in the information but it just different such as it. So , do you still thinking Automotive Control Systems is not loveable to be your top record reading book?

George Hughes:

Beside this specific Automotive Control Systems in your phone, it might give you a way to get closer to the new knowledge or details. The information and the knowledge you will got here is fresh from the oven so don't always be worry if you feel like an older people live in narrow commune. It is good thing to have Automotive Control Systems because this book offers for you readable information. Do you sometimes have book but you do not get what it's facts concerning. Oh come on, that will not happen if you have this with your hand. The Enjoyable option here cannot be questionable, including treasuring beautiful island. Use you still want to miss the item? Find this book in addition to read it from right now!

Wanda Pence:

As we know that book is essential thing to add our expertise for everything. By a e-book we can know everything we wish. A book is a range of written, printed, illustrated as well as blank sheet. Every year seemed to be exactly added. This reserve Automotive Control Systems was filled about science. Spend your extra time to add your knowledge about your technology competence. Some people has distinct feel when they reading a new book. If you know how big benefit of a book, you can really feel enjoy to read a e-book. In the modern era like today, many ways to get book which you wanted.

Read Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci for online ebook

Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci books to read online.

Online Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci ebook PDF download

Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci Doc

Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci Mobipocket

Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci EPub

7O0BWJCZGKN: Automotive Control Systems By A. Galip Ulsoy, Huei Peng, Melih Çakmakci