



# **Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control)**

Halim Alwi, Christopher Edwards, Chee Pin Tan

Download now

Click here if your download doesn"t start automatically

## Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control)

Halim Alwi, Christopher Edwards, Chee Pin Tan

Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) Halim Alwi, Christopher Edwards, Chee Pin Tan

Fault Detection and Fault-tolerant Control Using Sliding Modes is the first text dedicated to showing the latest developments in the use of sliding-mode concepts for fault detection and isolation (FDI) and fault-tolerant control in dynamical engineering systems. It begins with an introduction to the basic concepts of sliding modes to provide a background to the field. This is followed by chapters that describe the use and design of sliding-mode observers for FDI using robust fault reconstruction. The development of a class of sliding-mode observers is described from first principles through to the latest schemes that circumvent minimum-phase and relative-degree conditions. Recent developments have shown that the field of fault tolerant control is a natural application of the well-known robustness properties of sliding-mode control. A family of sliding-mode control designs incorporating control allocation, which can deal with actuator failures directly by exploiting redundancy, is presented. Various realistic case studies, specifically highlighting aircraft systems and including results from the implementation of these designs on a motion flight simulator, are described.

A reference and guide for researchers in fault detection and fault-tolerant control, this book will also be of interest to graduate students working with nonlinear systems and with sliding modes in particular.

Advances in Industrial Control aims to report and encourage the transfer of technology in control engineering. The rapid development of control technology has an impact on all areas of the control discipline. The series offers an opportunity for researchers to present an extended exposition of new work in all aspects of industrial control.



Read Online Fault Detection and Fault-Tolerant Control Using ...pdf

Download and Read Free Online Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) Halim Alwi, Christopher Edwards, Chee Pin Tan

#### From reader reviews:

#### **Vincent Baker:**

Here thing why this particular Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) are different and reliable to be yours. First of all looking at a book is good but it really depends in the content of the usb ports which is the content is as tasty as food or not. Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) giving you information deeper including different ways, you can find any reserve out there but there is no book that similar with Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control). It gives you thrill examining journey, its open up your eyes about the thing that will happened in the world which is probably can be happened around you. You can actually bring everywhere like in park your car, café, or even in your way home by train. Should you be having difficulties in bringing the imprinted book maybe the form of Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) in e-book can be your alternate.

#### Jennifer Phinney:

Do you have something that you want such as book? The guide lovers usually prefer to select book like comic, small story and the biggest you are novel. Now, why not striving Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) that give your pleasure preference will be satisfied through reading this book. Reading practice all over the world can be said as the opportunity for people to know world considerably better then how they react towards the world. It can't be mentioned constantly that reading routine only for the geeky man or woman but for all of you who wants to become success person. So, for all you who want to start reading through as your good habit, you could pick Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) become your current starter.

#### Thelma Olivares:

Do you like reading a book? Confuse to looking for your preferred book? Or your book had been rare? Why so many concern for the book? But any kind of people feel that they enjoy intended for reading. Some people likes looking at, not only science book but novel and Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) or even others sources were given know-how for you. After you know how the good a book, you feel would like to read more and more. Science guide was created for teacher or perhaps students especially. Those publications are helping them to put their knowledge. In various other case, beside science guide, any other book likes Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) to make your spare time considerably more colorful. Many types of book like here.

#### **Alissa Sowell:**

Book is one of source of information. We can add our expertise from it. Not only for students and also native or citizen need book to know the up-date information of year to help year. As we know those books have many advantages. Beside many of us add our knowledge, can also bring us to around the world. Through the book Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) we can take more advantage. Don't you to be creative people? To get creative person must want to read a book. Simply choose the best book that acceptable with your aim. Don't possibly be doubt to change your life with that book Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control). You can more attractive than now.

Download and Read Online Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) Halim Alwi, Christopher Edwards, Chee Pin Tan #5YOTGUDEK7P

### Read Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) by Halim Alwi, Christopher Edwards, Chee Pin Tan for online ebook

Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) by Halim Alwi, Christopher Edwards, Chee Pin Tan 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 Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) by Halim Alwi, Christopher Edwards, Chee Pin Tan books to read online.

Online Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) by Halim Alwi, Christopher Edwards, Chee Pin Tan ebook PDF download

Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) by Halim Alwi, Christopher Edwards, Chee Pin Tan Doc

Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) by Halim Alwi, Christopher Edwards, Chee Pin Tan Mobipocket

Fault Detection and Fault-Tolerant Control Using Sliding Modes (Advances in Industrial Control) by Halim Alwi, Christopher Edwards, Chee Pin Tan EPub