

Robust Three-Axis Attitude Control System for Micro Satellites



Filesize: 1.01 MB

Reviews

Certainly, this is the greatest work by any author. It can be written in easy words and phrases rather than confusing. I am just happy to let you know that this is actually the greatest ebook we have studied inside my individual daily life and may be the greatest ebook for at any time.

(Trent Monahan)

ROBUST THREE-AXIS ATTITUDE CONTROL SYSTEM FOR MICRO SATELLITES

[DOWNLOAD PDF](#)

Shaker Verlag Jun 2011, 2011. Buch. Condition: Neu. Neuware - Technical advances in microelectronics and micromechanics signalled the start of an era for small satellites in the late 1980's. Particularly in the last decade small satellites have proven their potential not only in missions with scientific and educational objectives, but also for those with cost-effective commercial and governmental purposes. Fault tolerance and reliability still remain however, a key issue for technical and economical advancement in small satellite design. This thesis therefore proposes a concept for a fault tolerant and robust attitude determination and control system adapted to micro satellites. After an investigation of modern fault handling approaches, a model based fault detection approach with hardware redundancy was chosen. This approach is particularly applicable for the use in small satellites, as the fault detection is realized not necessarily by additional hardware but by software algorithms. A hierarchical fault handling concept, a model based fault detection algorithm, and a novel time-optimal state control algorithm are all proposed. These algorithms were verified in a simulation and implemented in the three-axis attitude control system of the small satellite TET-1. Finally the concept was successfully verified in a hardware-in-the-loop test bed. The hierarchical fault handling and model based fault detection approach is also applicable for any other small satellite, for which dedicated fault handling hardware is not suitable due to cost, mass, or power limitations. The time-optimal attitude and rate control algorithm enable optimal attitude control performance in the presence of system noise. This thesis therefore provides a general methodology for the design of a reliable, fault-tolerant, and robust attitude control system for small (micro) satellites. 137 pp. Englisch.

[Read Robust Three-Axis Attitude Control System for Micro Satellites Online](#)[Download PDF Robust Three-Axis Attitude Control System for Micro Satellites](#)

Other Books



Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel s System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can download...

[Save eBook »](#)



Unplug Your Kids: A Parent's Guide to Raising Happy, Active and Well-Adjusted Children in the Digital Age

Adams Media Corporation. Paperback. Book Condition: new. BRAND NEW, Unplug Your Kids: A Parent's Guide to Raising Happy, Active and Well-Adjusted Children in the Digital Age, David Dutwin, TV. Web Surfing. IMing. Text Messaging. Video...

[Save eBook »](#)



Anna's Fight for Hope: The Great Depression 1931 (Sisters in Time Series 20)

Barbour Publishing, Inc., 2004. Paperback. Book Condition: New. No Jacket. New paperback book copy of Anna's Fight for Hope: The Great Depression 1931 (Sisters in Time Series 20). Publisher recommended for ages 8 to 12...

[Save eBook »](#)



Sarah's New World: The Mayflower Adventure 1620 (Sisters in Time Series 1)

Barbour Publishing, Inc., 2004. Paperback. Book Condition: New. No Jacket. New paperback book copy of Sarah's New World: The Mayflower Adventure 1620 by Colleen L. Reece. Sisters in Time Series book 1. Christian stories for...

[Save eBook »](#)



California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Loose-leaf. Book Condition: New. 10th. 249 x 201 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

[Save eBook »](#)

**Fart Book African Bean Fart Adventures in the Jungle: Short Stories with Moral**

Createspace, United States, 2013. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Black White Illustration Version! BONUS - Includes FREE Dog Fart Audio Book for

[Save PDF »](#)

**The Young Outlaw; Or, Adrift in the Streets**

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.The Young Outlaw is the sixth volume of the Tattered Tom Series, and

[Save PDF »](#)

**Leave It to Me (Ballantine Reader's Circle)**

Ballantine Books. PAPERBACK. Book Condition: New. 0449003965 12+ Year Old paperback book-Never Read-may have light shelforhandling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship FAST

[Save PDF »](#)

**World of Reading: Minnie A Walk in the Park: Level Pre-1**

Disney Press. Taschenbuch. Book Condition: Neu. Gebraucht - Sehr gut ungelesen, sehr guter Zustand; Rechnung mit MwSt.; unused/unread, very good condition; - Walking dogs can be RUFF! Minnie, Daisy, and Cuckoo-Loca are having a tail-waggin'

[Save PDF »](#)

**Read Write Inc. Phonics: Pink Set 3 Storybook 8 in the Night**

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 201 x 148 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read

[Save PDF »](#)