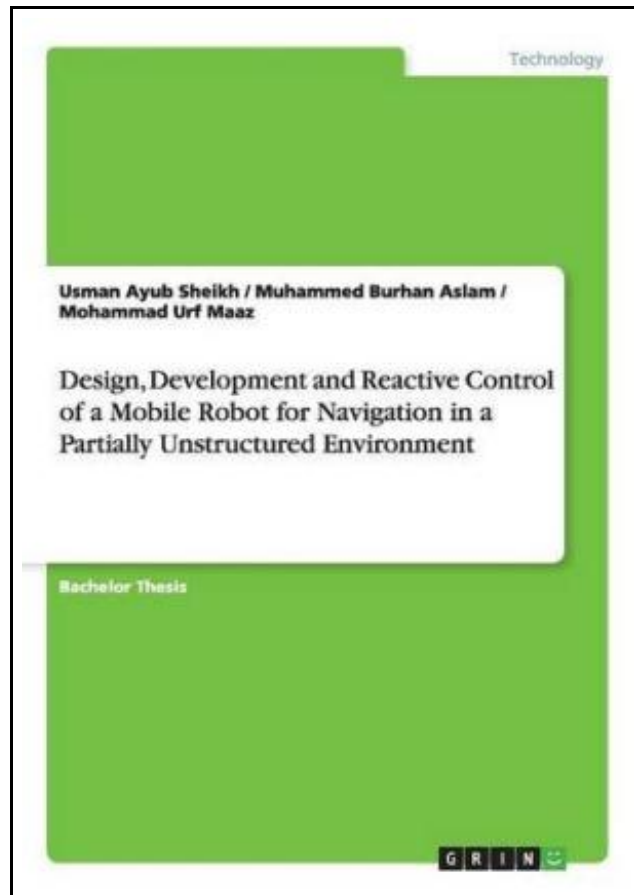# Design, Development and Reactive Control of a Mobile Robot for Navigation in a Partially Unstructured Environment

Filesize: 2.58 MB

Reviews

A must buy book if you need to adding benefit. It is actually rally fascinating throgh studying time. Your way of life span will likely be transform as soon as you complete looking over this publication.

(Ms. Bernice Rolfson)

DESIGN, DEVELOPMENT AND REACTIVE CONTROL OF A MOBILE ROBOT FOR NAVIGATION IN A PARTIALLY UNSTRUCTURED ENVIRONMENT

To save **Design, Development and Reactive Control of a Mobile Robot for Navigation in a Partially Unstructured Environment** PDF, make sure you access the button beneath and download the file or gain access to additional information that are related to DESIGN, DEVELOPMENT AND REACTIVE CONTROL OF A MOBILE ROBOT FOR NAVIGATION IN A PARTIALLY UNSTRUCTURED ENVIRONMENT ebook.

GRIN Verlag Dez 2015, 2015. Taschenbuch. Book Condition: Neu. 210x148x4 mm. This item is printed on demand - Print on Demand Neuware - Bachelor Thesis from the year 2013 in the subject Electrotechnology, grade: Excellent, , course: BS Electrical Engineering, language: English, abstract: Mobile robots have emerged in the recent years as solutions to many real-life situations which occur in an unknown environment. In such cases, the mobile robot must be able to navigate through the unstructured workspace. The purpose of this project is to study and implement stimulus and response based control for real-time navigation of a mobile robot. A fuzzy logic control algorithm has been taken as a proposed behavioural control scheme and successful simulations on MobotSim® are presented before the design of the robot. The design is a compact differentially driven circular mobile robot which fits a 25 x 25 x 30 cm3 box. Moreover, a detachable ball-potting mechanism has also been designed, fabricated, and placed on the robot. The robot was designed in Autodesk Inventor® and the fabrication procedures including casting and machining were used to fabricate different parts. Embedded control system is designed and implemented using PIC18F4520 as master, multiple PIC18F2431 based motor control cards as slaves. IR range sensors have been used to take measurements from the environment. Simulations for PIC micro-controllers have been performed on Proteus® and implemented on hardware. Finally, successful experiments were conducted to verify basic navigation. The platform can further be used to study and implement other control techniques for future research. 60 pp. Englisch.

📄   Read Design, Development and Reactive Control of a Mobile Robot for Navigation in a Partially Unstructured Environment Online
📄   Download PDF Design, Development and Reactive Control of a Mobile Robot for Navigation in a Partially Unstructured Environment

Other PDFs

[PDF] Psychologisches Testverfahren

Click the hyperlink under to read "Psychologisches Testverfahren" document.

Download ePub »

[PDF] Programming in D

Click the hyperlink under to read "Programming in D" document.

Download ePub »

[PDF] Hope for Autism: 10 Practical Solutions to Everyday Challenges

Click the hyperlink under to read "Hope for Autism: 10 Practical Solutions to Everyday Challenges" document.

Download ePub »

[PDF] You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most

Click the hyperlink under to read "You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most" document.

Download ePub »

[PDF] The new era Chihpen woman required reading books: Chihpen woman Liu Jieli financial surgery(Chinese Edition)

Click the hyperlink under to read "The new era Chihpen woman required reading books: Chihpen woman Liu Jieli financial surgery(Chinese Edition)" document.

Download ePub »

[PDF] Hands Free Mama: A Guide to Putting Down the Phone, Burning the To-Do List, and Letting Go of Perfection to Grasp What Really Matters!

Click the hyperlink under to read "Hands Free Mama: A Guide to Putting Down the Phone, Burning the To-Do List, and Letting Go of Perfection to Grasp What Really Matters!" document.

Download ePub »