Library: Βιβλιοθήκη Γυμνασίου Πλατανιά
Category: Εκπαιδευτική Ρομποτική->4. Τεχνολογία επιστήμες
Year: 2003
Pages: 600
Catalogo: ROBOT
isbn: 1931836752

Review
Overview

In LEGO Mindstorm Masterpieces, some of the world's leading LEGO Mindstorms inventors share their knowledge and development secrets. The unique style of this book will allow it to cover an incredibly broad range of topics in unparalleled detail. Chapters within the book will include detailed discussions of the mechanics that drive the robot - and also provide step-by-step construction diagrams for each of the robots. This is perfect book for LEGO hobbyists looking to take their skills to the next level whether they build world-class competitive robots or just like to mess around for the fun of it.

For experienced users of LEGO Mindstorms, LEGO Mindstorms Masterpiece is composed of three fundamental sections:
· Part One: A review of the advanced robot building concepts and theories.
· Part Two: Step-by-step building instructions for a series of complex models. The companion programming code is included, along with in-depth explanations of concepts needed for the specific models. Robots include Line Followers, Bipeds, Stair and Wall Climbers, a Joystick Controlled Cannon, a Robotic Game Player, Plant Waterer, and a Drink Mixer.
· Part Three: Ideas for modifying the building instructions by expanding the pieces and kits.

Topics covered:
1. Behavior: This section includes robots designed to interact with the environment, or with other robots. Behavior is the key word as the robots are designed to behave in some specific way, and all the technical details and implementations are secondary to this main goal.

2. Motion: The projects in this category are aimed at solving some specific motion problem. The focus of these robots is on the mechanical techniques rather than on software.
3. Interaction: These projects allow the reader to build robots for the purpose of interacting with the user by playing games or responding to user commands in real time.
4. Automation: Opposite of the previous category, this one hosts robots designed to perform totally automated operations. These projects will build robots able to complete tasks without human intervention.
5. Calculus: The most abstract of the sections contain robots with minimum knowledge of the external world. Pneumatic ALUs, and Turning machines are fully explained.

Ø Advanced users need inspiration too! Advanced projects with suggestions for enhancements and improvements make the explanations of the theories and physics of the robots as well as the complete building instructions, make this book extremely useful to readers long after the building of the robots has been completed.
Ø Written by the "DaVincis of LEGO" and other highly regarded LEGO personalities. This experienced authoring team is assembled of highly respected and visible superstars in the LEGO community.
Ø Proven success in the LEGO MINDSTORMS market. Syngress has already had a hit with the bestselling book, Building Robots with LEGO MINDSTORMS

In LEGO Mindstorm Masterpieces, some of the world's leading LEGO Mindstorms inventors share their knowledge and development secrets. The unique style of this book will allow it to cover an incredibly broad range of topics in unparalleled detail. Chapters within the book will include detailed discussions of the mechanics that drive the robot - and also provide step-by-step construction diagrams for each of the robots. This is perfect book for LEGO hobbyists looking to take their skills to the next level whether they build world-class competitive robots or just like to mess around for the fun of it.

For experienced users of LEGO Mindstorms, LEGO Mindstorms Masterpiece is composed of three fundamental sections:
*Part One: A review of the advanced robot building concepts and theories.
*Part Two: Step-by-step building instructions for a series of complex models. The companion programming code is included, along with in-depth explanations of concepts needed for the specific models. Robots include Line Followers, Bipeds, Stair and Wall Climbers, a Joystick Controlled Cannon, a Robotic Game Player, Plant Waterer, and a Drink Mixer.
*Part Three: Ideas for modifying the building instructions by expanding the pieces and kits.

Topics covered:

1.Behavior: This section includes robots designed to interact with the environment, or with other robots. Behavior is the key word as the robots are designed to behave in some specific way, and all the technical details and implementations are secondary to this main goal.
2.Motion: The projects in this category are aimed at solving some specific motion problem. The focus of these robots is on the mechanical techniques rather than onsoftware.
3.Interaction: These projects allow the reader to build robots for the purpose of interacting with the user by playing games or responding to user commands in real time.
4.Automation: Opposite of the previous category, this one hosts robots designed to perform totally automated operations. These projects will build robots able to complete tasks without human intervention.
5.Calculus: The most abstract of the sections contain robots with minimum knowledge of the external world. Pneumatic ALUs, and Turning machines are fully explained.

OAdvanced users need inspiration too! Advanced projects with suggestions for enhancements and improvements make the explanations of the theories and physics of the robots as well as the complete building instructions, make this book extremely useful to readers long after the building of the robots has been completed.
OWritten by the "DaVincis of LEGO" and other highly regarded LEGO personalities. This experienced authoring team is assembled of highly respected and visible superstars in the LEGO community.
OProven success in the LEGO MINDSTORMS market. Syngress has already had a hit with the bestselling book, Building Robots with LEGO MINDSTORM