

Practical Robot Design: Game Playing Robots

By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon



Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon

Designed for beginners, undergraduate students, and robotics enthusiasts, **Practical Robot Design: Game Playing Robots** is a comprehensive guide to the theory, design, and construction of game-playing robots. Drawing on years of robot building and teaching experience, the authors demonstrate the key steps of building a robot from beginning to end, with independent examples for extra modules. Each chapter covers basic theory and key topics, including actuators, sensors, robot vision, and control, with examples and case studies from robotic games. Furthermore, the book discusses the application of AI techniques and provides algorithms, and application examples with MATLAB® code.

The book includes:

- Comprehensive coverate on drive motors and drive motor control
- References to vendor websites as necessary
- Digital control techniques, with a focus on implementation
- Techniques for designing and implementing slightly advanced controllers for pole-balancing robots
- Basic artificial intelligence techniques with examples in MATLAB
- Discussion of the vision systems, sensor systems, and controlling of robots

The result of a summer course for students taking up robotic games as their finalyear project, the authors hope that this book will empower readers in terms of the necessary background as well as the understanding of how various engineering fields are amalgamated in robotics.



Practical Robot Design: Game Playing Robots

By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon

Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon

Designed for beginners, undergraduate students, and robotics enthusiasts, **Practical Robot Design: Game Playing Robots** is a comprehensive guide to the theory, design, and construction of game-playing robots. Drawing on years of robot building and teaching experience, the authors demonstrate the key steps of building a robot from beginning to end, with independent examples for extra modules. Each chapter covers basic theory and key topics, including actuators, sensors, robot vision, and control, with examples and case studies from robotic games. Furthermore, the book discusses the application of AI techniques and provides algorithms, and application examples with MATLAB® code.

The book includes:

- Comprehensive coverate on drive motors and drive motor control
- References to vendor websites as necessary
- Digital control techniques, with a focus on implementation
- Techniques for designing and implementing slightly advanced controllers for pole-balancing robots
- Basic artificial intelligence techniques with examples in MATLAB
- Discussion of the vision systems, sensor systems, and controlling of robots

The result of a summer course for students taking up robotic games as their final-year project, the authors hope that this book will empower readers in terms of the necessary background as well as the understanding of how various engineering fields are amalgamated in robotics.

Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon Bibliography

• Sales Rank: #4350890 in Books

Brand: Brand: CRC PressPublished on: 2013-10-17Original language: English

• Number of items: 1

• Dimensions: 9.30" h x 1.00" w x 6.20" l, .0 pounds

• Binding: Hardcover

• 418 pages





Download and Read Free Online Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon

Editorial Review

About the Author

Muhammet Fikret Ercan and Jagannathan Kanniah are both with Singapore Polytechnic, Singapore.

Users Review

From reader reviews:

Steven Zakrzewski:

Have you spare time for any day? What do you do when you have a lot more or little spare time? Yes, you can choose the suitable activity for spend your time. Any person spent all their spare time to take a stroll, shopping, or went to the actual Mall. How about open or perhaps read a book called Practical Robot Design: Game Playing Robots? Maybe it is to get best activity for you. You recognize beside you can spend your time along with your favorite's book, you can smarter than before. Do you agree with it is opinion or you have some other opinion?

Donald Andrews:

Now a day individuals who Living in the era just where everything reachable by match the internet and the resources in it can be true or not demand people to be aware of each facts they get. How people have to be smart in acquiring any information nowadays? Of course the answer then is reading a book. Examining a book can help persons out of this uncertainty Information mainly this Practical Robot Design: Game Playing Robots book because book offers you rich information and knowledge. Of course the details in this book hundred per-cent guarantees there is no doubt in it everbody knows.

Alissa Sowell:

Reading can called head hangout, why? Because while you are reading a book specifically book entitled Practical Robot Design: Game Playing Robots the mind will drift away trough every dimension, wandering in every single aspect that maybe mysterious for but surely can be your mind friends. Imaging each word written in a publication then become one web form conclusion and explanation this maybe you never get before. The Practical Robot Design: Game Playing Robots giving you one more experience more than blown away your thoughts but also giving you useful information for your better life within this era. So now let us demonstrate the relaxing pattern the following is your body and mind will likely be pleased when you are finished reading it, like winning an activity. Do you want to try this extraordinary paying spare time activity?

William Sam:

Reading a reserve make you to get more knowledge from this. You can take knowledge and information from your book. Book is written or printed or created from each source that will filled update of news. On this modern era like currently, many ways to get information are available for you actually. From media social such as newspaper, magazines, science e-book, encyclopedia, reference book, novel and comic. You can add your understanding by that book. Ready to spend your spare time to spread out your book? Or just seeking the Practical Robot Design: Game Playing Robots when you needed it?

Download and Read Online Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon #KGOE3MJ47A0

Read Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon for online ebook

Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon 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 Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon books to read online.

Online Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon ebook PDF download

Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon Doc

Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon Mobipocket

Practical Robot Design: Game Playing Robots By Jagannathan Kanniah, M. Fikret Ercan, Carlos A. Acosta Calderon EPub