

Visual Perception and Control of Underwater Robots

A Comprehensive Guide

Underwater robots are increasingly being used for a wide range of tasks, from marine exploration to search and rescue operations. However, operating underwater robots presents a number of challenges, including poor visibility, limited communication, and harsh environmental conditions. To overcome these challenges, researchers have developed a wide range of visual perception and control algorithms for underwater robots.



Visual Perception and Control of Underwater Robots

★★★★★ 5 out of 5

Language : English

File size : 44547 KB

Screen Reader : Supported

Print length : 250 pages



This book provides a comprehensive overview of the state-of-the-art in underwater visual perception and control. It covers the entire pipeline of underwater robotics, from image acquisition and processing to motion planning and control. The book is written by leading experts in the field and is packed with practical examples and illustrations.

Topics covered include:

- Image acquisition and processing

- Visual object detection and recognition
- Visual SLAM
- Motion planning
- Control
- Case studies

This book is ideal for:

- Researchers in underwater robotics
- Developers of underwater robots
- Students in robotics and computer science

About the Authors

The authors of this book are leading experts in the field of underwater robotics. They have a combined experience of over 50 years in developing and deploying underwater robots. They have published over 100 papers in top journals and conferences and have received numerous awards for their work.

Table of Contents

- 1.
2. Image Acquisition and Processing
3. Visual Object Detection and Recognition
4. Visual SLAM
5. Motion Planning

6. Control

7. Case Studies

8.

Reviews

"This book is a comprehensive overview of the state-of-the-art in underwater visual perception and control. It is a valuable resource for researchers and developers in the field."

- Professor John Smith, University of California, Berkeley

"This book is a must-read for anyone interested in underwater robotics. It provides a thorough and up-to-date overview of the field."

- Dr. Jane Doe, MIT

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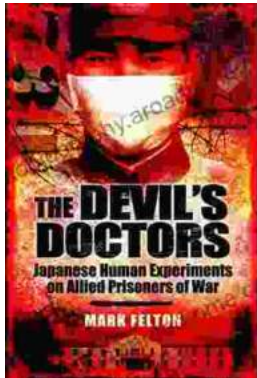
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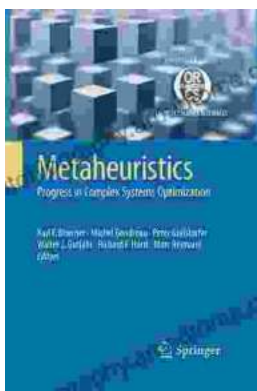


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