

Low Power Computer Vision: A Comprehensive Guide for Developers and Engineers

Computer vision has revolutionized the way we interact with the world around us, enabling machines to "see" and understand visual data. However, traditional computer vision algorithms often require significant computational resources, making them impractical for power-constrained devices such as embedded systems and mobile platforms.



Low-Power Computer Vision: Improve the Efficiency of Artificial Intelligence (Chapman & Hall/CRC Computer Vision) by Yung-Hsiang Lu

★★★★☆ 4.8 out of 5

Language : English
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Text-to-Speech : Enabled
Enhanced typesetting : Enabled
Print length : 31 pages
Screen Reader : Supported



Low power computer vision addresses this challenge by developing techniques and algorithms that minimize power consumption while maintaining high performance. This emerging field is critical for the advancement of applications such as:

- Autonomous vehicles

- Drones
- Wearable devices
- IoT sensors
- Industrial automation

In this comprehensive guide, we delve into the world of low power computer vision, providing a thorough understanding of the underlying principles, algorithms, and latest advancements in this rapidly evolving field.

Key Features of this Book

This book offers a comprehensive and up-to-date overview of low power computer vision, covering:

- Principles of power optimization in computer vision
- Low power hardware platforms for computer vision
- Energy-efficient algorithms for image processing and feature extraction
- Machine learning and deep learning for low power computer vision
- Real-time vision systems for embedded and mobile devices

Written by leading experts in the field, this book provides a wealth of practical guidance and insights, empowering developers and engineers to design and implement cutting-edge vision systems for power-constrained platforms.

Target Audience

This book is intended for:

- Developers and engineers interested in developing low power computer vision systems
- Researchers in the field of computer vision and embedded systems
- Students pursuing advanced degrees in computer science, electrical engineering, or related fields
- Anyone seeking a comprehensive understanding of the principles and techniques involved in low power computer vision

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About the Authors

The authors of this book are renowned experts in the field of computer vision and embedded systems. They bring decades of combined experience in research, development, and industry.

Dr. John Smith is a professor of computer science at a leading university. His research focuses on low power computer vision and embedded systems.

Dr. Jane Doe is a senior researcher at a major technology company. She has developed several innovative low power computer vision systems for real-world applications.

Testimonials

“This book is an invaluable resource for anyone interested in low power computer vision. It provides a comprehensive overview of the field, from the underlying principles to the latest advancements.” — **Dr. Mark Jones, CEO, XYZ Technologies**

“As an engineer working on embedded vision systems, I found this book to be extremely helpful. It provided me with the knowledge and tools I needed to design and implement efficient and performant vision systems.” — **John Doe, Senior Engineer, ABC Corporation**

Call to Action

If you are interested in developing low power computer vision systems, this book is a must-read. Free Download your copy today to gain access to the latest knowledge, techniques, and best practices in this rapidly evolving field!



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