



entropy



Special Issue Reprint

Application of Information Theory to Computer Vision and Image Processing

www.mdpi.com/books/reprint/8863

Edited by

Wendy Flores-Fuentes

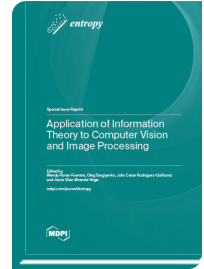
Oleg Sergiyenko

Julio Cesar Rodríguez-Quiñonez

Jesús Elías Miranda-Vega

ISBN 978-3-7258-0292-0 (Hardback)

ISBN 978-3-7258-0291-3 (PDF)



World perception is the product of complex optical and physical processes in the human visual system, wherein light stimuli penetrate the pupils to reach the retina, which are composed of photoreceptors that transform light into electrochemical energy to be transmitted to the brain for organization, interpretation, and analysis of the received information and to recreate the perceived reality. Using similar optical and physical processes, machine vision is the eyes of cybernetics systems and allows for the virtual and real worlds to coexist in human lives, thus integrating these technologies into our daily lives for improved creativity and globalization through interconnectivity. This is possible due to the ability of advanced sensor and system technologies to acquire and compute information. Such tasks are based on the integration of optoelectronic devices for sensors and cameras. Sensors, artificial intelligence algorithms, embedded systems, robust control, inertial navigation systems, robotics, interconnectivity, big data, and cloud computing are the core of machine vision developments for cyber–physical systems to collaborate with humans and their real and virtual environments and activities.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/8863

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.