Special Issue

Computer Vision Applications for Fisheries and Aquaculture

Message from the Guest Editors

The fisheries and aquaculture sectors are rapidly shifting toward precision management and sustainability through technological innovation. Computer vision, a key component of artificial intelligence, has emerged as a powerful tool to address long-standing challenges in these fields. This Special Issue highlights recent advances and applications of computer vision across the aquatic food production chain. The scope encompasses, but is not limited to, the following areas: automated biomass estimation, individual fish identification and tracking, behavior analysis for welfare and feeding optimization, species classification and sorting, early disease detection, underwater habitat and seabed monitoring, quality assessment of harvested aquatic products (e.g., freshness grading, defect detection), and the development of novel imaging systems (e.g., underwater, hyperspectral, low-cost) tailored for aquatic environments. We seek contributions that not only demonstrate technical excellence in algorithm development (deep learning, image processing) but also clearly articulate their practical impact on improving efficiency, sustainability, and profitability in aquaculture and wild fisheries.

Guest Editors

Prof. Dr. Zhangying Ye
Dr. Chao Zhou
Dr. Weiqiang Ni

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Fishes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
fishes@mdpi.com

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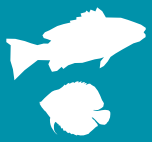

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About the Journal

Message from the Editor-in-Chief

Fishes is a multidisciplinary open access journal focusing on reports of original research and critical reviews and synthesis from the broad area of fishes and aquatic animals. The ultimate objective of *Fishes* is to facilitate the discovery of connections between research areas, advancing science and filling knowledge gaps, and providing solutions for all present and future issues encountered in the sector of fisheries and aquaculture. As Editor-in-Chief, I encourage you to consider *Fishes* for your scientific papers and would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Maria Angeles Esteban
Department of Cell Biology and Histology, Faculty of Biology, University of Murcia, 30100 Murcia, Spain

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