Special Issue

Sustainable Aquaponic Systems and the Role of Deep Learning in Aquaculture

Message from the Guest Editors

This Special Issue will focus on the innovative integration of aquaponic systems, with particular emphasis on the cultivation of lettuce, and the application of deep learning technologies in aquaculture. The issue will cover key topics such as nutrient cycling, water and energy efficiency in aquaponics, as well as the use of deep learning to optimize fish farming operations, from monitoring fish health to improving yield prediction. We invite contributions that explore cutting-edge research and applications in both aquaponic systems and the use of deep learning in aquaculture. Submissions may include novel system designs, Al-based solutions for fish management, and case studies that highlight the potential of integrating these two fields in order to generate more sustainable and productive farming practices. This Special Issue will provide valuable insights into the synergies between sustainable aquaponics and deep learning applications in aquaculture, advancing both fields and offering solutions to the challenges faced by modern agriculture and fisheries.

Guest Editors

Dr. Haihua Wang

College of Information and Electrical Engineering, China Agricultural University, 17 Qinghua East Road, Haidian, Beijing 100083, China

Dr. Shuofei Yang

College of Engineering, China Agricultural University, Beijing 100083, China

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

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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

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