Special Issue

Application of Intelligent Technologies in Farm Animal Disease, Feeding and Building Environmental Control

Message from the Guest Editors

Traditional livestock farming has long faced problems regarding inaccurate environmental control (lagging regulation of temperature, humidity, and harmful gases). a dependence on manual experience for disease prevention and control (leading to high misdiagnosis rates and strong lag), and low feed utilization rates (with waste rates averaging 15%-20%), resulting in low production efficiency, reduced economic benefits, and intensified environmental pollution on farms. The application of intelligent technologies provides technical support that makes it possible to accurately identify the physiological states of individual animals (such as their heart rate, body temperature, and rumination frequency), to regulate breeding environments in real time (by linking ventilation and temperature control systems), and to construct disease warning models. This Special Issue aims to highlight impactful research and commentary with a focus on using intelligent technologies to improve farm production efficiency and resource utilization, to ensure animal health and welfare, and to build sustainable ecosystems.

Guest Editors

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