Special Issue

Quadrupedal Gait Analysis in the Field

Message from the Guest Editor

An ever-increasing number of sensor devices and smartphone apps are emerging for the quantification of gait parameters in quadrupedal animals, with a particular focus on horses, amidst the heightened awareness of welfare-related topics in the context of equestrian sports and performance. With the advent of artificial intelligence-driven analysis and sensor use during racing and FEI-regulated equestrian sports, there comes the need to better understand how different tools and methods are working and which biomechanical parameters can be measured with precision. As an applied example of quadrupedal gait analysis in the field, in clinical practice, e.g., used by veterinarians or animal musculoskeletal practitioners or hoof care providers, quantitative measurements can aid in evidence-based decision-making or enable the move from a reactive paradigm of detecting impairments to a pro-active, preventative paradigm implementing long-term monitoring and performance optimization while minimizing injury risk. With this Special Issue, we invite contributions about quantitative measurements of animal movement 'in the field'.

Guest Editor

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