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Call for Papers

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Special Issue on:

Brain-Inspired Intelligence for Autonomous Unmanned System Application

The aim of this special issue on brain-inspired intelligence in cognitive and development for AUS applications is to bring together researchers and practitioners from both academia and industry into a forum, to show the state-of-the-art achievements and applications in the general area of brain-inspired intelligence in cognitive and development for autonomous unmanned system applications, by providing efficient scientific and engineering solutions, addressing the needs and challenges for integration with new technologies, and providing visions for future research and development.
Brain-inspired intelligence has become very popular for the Brain science, Cognitive science, Information Science and Engineering community in recent years. The theoretical advances in related disciplines such as cognitive science, brain science, neurosciences, development theory based on machine learning and deep learning have witnessed great breakthrough. The technical applications in cognitive and development for autonomous unmanned systems (AUSs)have solved many actual problems and accelerated its development.

Topics of interest include, but are not limited to:

- Real-time object detection, recognition and tracking of AUSs based on brain-inspired intelligence
- Audio-visual multimodal collaborative perception of AUSs based on brain-inspired intelligence
- Spatial positioning and navigation of AUSs based on brain-inspired intelligence
- Autonomous decision-making of autonomous unmanned system based on brain-inspired intelligence
- Autonomous control of autonomous unmanned system based on brain-inspired intelligence
- Brain-inspired cognitive and neural computing for autonomous unmanned system
- Brain-inspired information processing for autonomous unmanned system
- Brain-inspired chips and systems for autonomous unmanned system
- Brain-inspired computing and computing system for autonomous unmanned system
- Brain-computer interface
- Brain signal decoding
- Human-machine interaction/integration
- Ethical and societal issues in human augmentation and brain-computer interface

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