

IEEE Symposium on Computational Intelligence in Remote Sensing (IEEE CIRSS 2018)

18 – 21 November 2018, Bengaluru, India

Call for Papers

The main emphasis is on the development of computational intelligence (CI) techniques for solving satellite remote sensing (SRS) and unmanned aerial vehicle remote sensing (UAV-RS) problems and broadening the set of application domains to which they can be usefully applied. There is a need to build intelligent data processing system using CI for effective and efficient ways of solving a wide range of problem areas in Remote Sensing (RS). The system is said to be intelligent if it can perceive their goals, automatic in processing, learn from the environment and past experiences, and adapt to accommodate fast-changing environments and goals. Each task in an intelligent system is interesting and valuable in their own right, but building such system can facilitate a fundamental shift in the way we see them for solving complex SRS and UAV-RS problems. Artificial Neural Network, specifically Deep Learning Neural Network Spiking Neural Networks, and Extreme Machine Learning, Fuzzy logic as well as the gradient-free optimization techniques like Genetic Algorithm, Particle Swarm Optimization, Ant Colony Optimization Cuckoo Search Algorithm, Firefly Algorithm, play an important role in decision-making and modeling in RS related problems. Also, this symposium deals with different CI techniques for solving RS problems on big data.

The aim of the symposium is to bring together researchers from the academia and industries in the fields of RS and CI.

List of Topics

CIRSS invites authors to submit their contributions in the areas including, but not limited to the following:

RS Application

- Short/long term change detection in hyperspectral/ multispectral images
- Land-surface phenology using AVHRR/MODIS/VIIRS data
- Disaster monitoring using SAR image
- Forest monitoring by LIDAR
- Land use and land cover mapping
- Oil spill detection
- Ocean surface RS
- Land surface temperature
- Land surface dynamics
- Target detection
- Numerical weather modelling
- Agriculture monitoring
- Road extraction
- Forest fire mitigation
- Urban sprawl
- Power line monitoring

CI based processing

- Image registration
- Image enhancement
- Band selection
- SAR speckle filtering
- Spectral unmixing
- Image classification methods
- Image clustering methods
- Image segmentation
- Spectral-spatial methods
- Spatio-spectral fusion
- Regression techniques

Important Dates



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