

ARCAI 2024 Special Session “Robust control and adaptive optimization of complex dynamical systems”

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Call for Papers:

Adaptive and robust control scheme has attracted significant attention over the past few decades. It is known that the adaptive control model is a powerful tool for representing complex dynamical systems and many adaptive control methods have been successfully applied to the engineering field. Recently, many new results of modeling, control, and monitoring are developed in adaptive control systems, such as stochastic control, intelligent control, data-driven control and so on. We invite authors to contribute original research articles as well as review articles related to all aspects of modeling, control methods, optimization theories, monitoring, signal processing and fault detection for complex dynamical systems with adaptive control algorithms. All the submissions are expected to have original ideas and new approaches. Of particular interest are papers devoted to the development of engineering applications. Papers presenting computational issues, search strategies, and modeling and solution techniques to practical problems are also welcome.

Topics for this call for papers include but not restricted to:

- Adaptive and robust control and optimization of intelligent systems
- Adaptive and robust learning control scheme
- Adaptive and robust neural network modeling, control and optimization
- Adaptive and robust fuzzy modeling, control and optimization
- Adaptive and robust Control and Signal Processing
- Adaptive and robust estimation and fault detection algorithms
- Adaptive and robust fault tolerant control and optimization

Keywords: Adaptive control; robust control; fuzzy modeling; fault detection; optimization

Accepted and presented papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements and indexed by EI Compendex and Scopus. Selected papers will be invited to SCI Journal Special Issues.