ARCAI 2024 Special Session "Communication, modeling, and control for complex nonlinear systems and applications"

Principal Organizer(s): Min Ma, Nan Wang, Jinhua Zhang, Tong Wang

- 1. Min Ma, Soochow University, mma@suda.edu.cn
- 2. Nan Wang, Henan University of Science and Technology, wangnan@haust.edu.cn
- 3. Jinhua Zhang, Guangzhou University, zjhjd@gzhu.edu.cn
- 4. Tong Wang, Harbin Institute of Technology, twang@hit.edu.cn

Call for Papers:

Autonomous vehicles, smart grids, and robotic systems are all examples of complex nonlinear systems. Because of the wide existence of complex nonlinear systems in practical engineering, the investigation of such systems has drawn much attention. Recently, a lot of interesting results on network-induced phenomena and the modeling for uncertain dynamics of complex systems have been gained. Learning based control design schemes via online data and offline data for such systems also show their advantages. Therefore, we invite authors to share and submit original manuscript in the fields of information transmission, intelligent modeling mechanism, learning-based control schemes, and other related results for complex nonlinear systems.

Topics of this session include but are not limited to:

- Network attacks and security control
- > System identification theory
- > Fuzzy logic systems and fuzzy control
- ➤ Neural networks control and deep learning
- ➤ Learning control schemes
- Control design and complex systems

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.