## **CALL FOR PAPERS**

### **SPECIAL SESSION ON**

# "Data Science, Control and Optimization in Complex Systems" DOCS2022

May 27-29, 2022 - Chengdu, Sichuan, China

## **Session Organizers:**

Yi ZUO, Dalian Maritime University, zuo@dlmu.edu.cn Li-ying HAO, Dalian Maritime University, haoliying\_0305@163.com Xuesong LIU, Dalian Maritime University, xsliu@dlmu.edu.cn

#### **Session Area:**

Complex Systems of Maritime Management, Urban Transportation and Civil Engineering

#### **Session Description:**

In this special session, we discuss and study complex system of maritime management, urban transportation and civil engineering. Since last decades, Big Data and its applications have been widely used in the real-world cases, e.g. data science in information systems, intelligent control in nonlinear systems and data-driven optimization in decision-making systems. In order to find new horizons, we would like to encourage participations from various domains systems design, machine learning, knowledge discovery, decision-making support, control theory, multi-agent system, evolutionary computation, and ideas beyond existing disciplines.

Topics and Technical Issues include (but not limited to)

Data science: 1) data mining; 2) expert system; 3) knowledge discovery in database; 4) deep learning; 5) pattern recognition.

Control and Optimization: 1) reinforcement learning; 2) multi-objective optimization; 3) intelligent fault tolerant control; 4) robust control; 5) adaptive dynamic programming.

Complex Systems: 1) game theory; 2) social networks analysis; 3) complex networks and systems; 4) multi-agent systems; 5) modeling, control and simulations of biological systems.

# **Keywords**

Data Science, Intelligent Control, Optimization, Complex Systems, Game Theory, Evolutionary Computation

## **SUBMISSION**

Papers must be submitted electronically for peer review through TCCT Conference Paper Management by **Feb 15, 2022:** <a href="https://cms.amss.ac.cn/index.php">https://cms.amss.ac.cn/index.php</a>.

All papers must be written in English and should describe original work. For guidelines, please follow the DOCS website link <a href="https://docs2022.github.io/">https://docs2022.github.io/</a>.

# **Important Dates**

February 15, 2022: deadline for paper submission

March 15, 2022: notification of paper acceptance/rejection April 15, 2022: deadline for final camera-ready papers.