

征文通知

由中国自动化学会数据驱动控制、学习与优化专业委员会主办的2021年IEEE第十届数据驱动控制与学习系统会议 (DDCLS'21) 将于2021年5月14-16日在江苏苏州市举办。会议由中国自动化学会数据驱动控制、学习与优化专业委员会 (DDCLO) 发起,旨在为数据驱动控制、学习与优化领域的国内外学者与技术人员提供一个学术交流平台,展示最新的 理论与技术成果。会议采用大会报告、专题研讨会、会前专题讲座、分组报告和张贴论文等形式进行交流。

DDCLS'21邀请到湖南大学王耀南院士、南京航空航天大学姜斌教授、University of Virginia的Zongli Lin教授和 Imperial College London的Thomas Parisini教授做大会报告。DDCLS系列会议已经成功举办9届。近三年,2018年恩施的 第七届、2019年大理的第八届、2020年柳州的第九届DDCLS学术会议都邀请了知名学者做大会报告,包括University of Stuttgart的Frank Allgöwer 教授,Imperial College London的Alessandro Astolfi教授,香港中文大学陈本美教授,广东工业大 学刘德荣教授,University of Cyprus的Marios M. Polycarpou教授,Politecnico di Milano的Cesare Alippi教授,东北大学的杨 光红教授, University of Duisburg-Essen的Steven X. Ding教授, KTH Royal Institute of Technology的 Håkan Hjalmarsson教授, 华东理工大学钱锋院士等。DDCLS'21会议将更加规模化和国际化,力争打造一个具有较大影响力的国际学术交流平台, 促进中国数据驱动控制、学习与优化领域在国内外的学术影响以及在国内的健康发展。

苏州,古称姑苏、平江,地处华东地区、江苏东南部、长三角中部,是扬子江城市群重要组成部分,东临上海、南接 嘉兴、西抱太湖、北依长江,是国务院批复确定的中国长江三角洲重要的中心城市之一、国家高新技术产业基地和风景旅 游城市。苏州是首批国家历史文化名城之一,有近2500年历史,是吴文化的重要发祥地,有"人间天堂"的美誉,中国私 家园林的代表——苏州古典园林和中国大运河苏州段被联合国教科文组织列为世界文化遗产。此外,苏州长期与上海、深 圳并列,是全国仅有的三个规模以上工业总产值连续七年稳定在3万亿以上的城市之一。2021年,人间天堂、中国最强地 级市、全球第一大工业城市——苏州欢迎您!

之前几届DDCLS会议收录的英文论文都已进入IEEEXplore并被EI检索,DDCLS'21会议录用的英文论文经IEEE审核 后也将进入IEEE Xplore数据库并被EI检索。DDCLS'21会议征文范围包括但不限于以下范围:

- ▶数据驱动控制理论、方法及应用
- ▶无模型自适应控制理论与应用
- ▶自抗扰控制技术及应用
- ▶数据驱动的故障诊断、健康维护与性能评价
- ▶迭代学习辨识与迭代学习控制 (重复控制)
- ▶数据驱动的建模、优化、调度、决策及仿真
- ▶统计学习、机器学习、数据挖掘及在自动化领域的应用
- ▶应用神经网络、模糊系统的数据驱动方法

- ▶增强学习控制、强化学习控制
- ▶数据驱动控制的鲁棒性
- ▶数据驱动控制与基于模型控制之间关系
- ▶数据驱动方法在工业过程中的应用
- ▶数据驱动交通系统建模、控制与优化
- ▶实际复杂系统的数据驱动控制
- ▶复杂大数据系统的技术及应用
- ▶工业过程大数据及系统和控制

DDCLS优秀论文奖:会议设优秀论文奖,由国内外数据驱动控制和学习领域专家组成的评奖委员会,根据论文的技 术内容和宣讲情况评选出1~2篇DDCLS优秀论文。

投稿须知:本次会议的投稿论文请于2021年3月15日前通过http://cms.amss.ac.cn/提交全文初稿。录用文章的作者需要按照会 议要求撰写论文并提交终稿。会议论文包括分组报告和邀请组报告,具体稿件要求详见DDCLS'21会议网站

http://eie.usts.edu.cn/ddcls2021/index.html。会议接受并收录的论文需作者注册并到会宣讲。有问题可咨询chkyin@bjtu.edu.cn。 重要日期

提交论文/邀请组申请截止日期 2021年1月31日 2021年3月15日

录用通知日期 2021年3月10日 2021年4月2日

终稿提交/作者注册截止日期 2021年3月31日 2021年4月18日



IEEE









主办单位:中国自动化学会数据驱动控制、学习 与优化专业委员会,北京交通大学,青岛大学 协办单位: IEEE 北京分会, IEEE工业电子协会,

> IEEE计算智能协会北京分会 承办单位: 苏州科技大学

CALL FOR PAPERS

The 2021 IEEE 10th Data Driven Control and Learning Systems Conference (DDCLS'21) will be held in Suzhou, Jiangsu Province, China, on May 14-16, 2021. Situated at the subtropical zone, Suzhou enjoys a warm and moist monsoon maritime climate. It has four distinctive seasons of which winter and summer are long while spring and autumn are short. Well-known as a Land of Fish and Rice and Silk Capital, Suzhou enjoys the fame as Paradise on Earth. There are altogether 51 civil and military No. 1 Scholars in history and 123 academicians of the Chinese Academy of Sciences and Chinese Academy of Engineering coming from Suzhou, and therefore Suzhou is known as a famous "Hometown of Scholars" and "Hometown of Academicians".

Prof. Yaonan Wang (Hunan University, China), Prof. Bin Jiang (Nanjing University of Aeronautics and Astronautics, China), Prof. Zongli Lin (University of Virginia, USA) and Prof. Thomas Parisini (Imperial College London, UK) are invited to deliver the keynote addresses at DDCLS'21. Data Driven Control and Learning Systems Conference (DDCLS) is an annual conference organized by Technical Committee on Data Driven Control, Learning and Optimization, Chinese Association of Automation. In the last three DDCLS conferences, a lot of renowned scholars from different countries were invited to deliver keynote addresses, for example, Prof. Frank Allgöwer from University of Stuttgart, Prof. Alessandro Astolfi from Imperial College London, Prof. Ben M. Chen from The Chinese University of Hong Kong, Prof. Derong Liu from Guangdong University of Technology, Prof. Marios M. Polycarpou from University of Cyprus, Prof. Cesare Alippi from Politecnico di Milano, and Prof. Gang H. Yang from Northeastern University, Prof. Steven X. Ding from University of Duisburg-Essen, Prof. Håkan Hjalmarsson from KTH Royal Institute of Technology, Prof. Feng Qian from East China University of Science and Technology.

The objectives of DDCLS'21 are to provide high quality research and professional interactions on the advancement of theory, technology and practical applications in the fields of data-driven control, learning, automation and optimization. DDCLS'21 includes plenary speeches by world-leading experts, regular sessions, invited sessions, poster sessions, workshops and panel discussion. The scientists, engineers and practitioners in the data driven science and engineering related fields are cordially invited to participate in a wealth of the presentations, discussion and social activities, and to enjoy the unique cultural and scenic experience that Suzhou offers for its beauty, history and hospitality.

The English papers accepted by our previous DDCLS conferences had been included in the IEEE Xplore, and indexed by EI Compendex and ISTP database.

The DDCLS'21 covers both theory and applications in all the areas of data driven control and learning systems. The topics of interest include, but are not limited to:

- -- Data-driven control theory, approaches and applications
- -- Model-free adaptive control theory and applications
- -- Active disturbance rejection control and applications
- -- Data-driven fault diagnosis, health maintenance and performance evaluation
- -- Iterative learning identification, iterative learning control, repetitive control
- -- Data-driven modeling, optimization, scheduling, decision and simulation
- -- Statistical learning, machine learning, data mining and practical applications in automation field
- -- Neural networks, fuzzy systems control methods in data driven manner
- -- Reinforcement learning control
- -- Robustness on data-driven control
- -- Complementary controller design approaches and relationships between data-driven and model-based control methods
- -- Applications of data-driven methods to industrial processes
- -- Data-driven modeling, control and optimization for traffic systems
- -- Data-driven control for practical complex processes
- -- Technology of complex big-data systems and applications
- -- Big data in industrial processes and its applications in modeling and control

DDCLS Best Paper Award: Selection of the awarded paper will be made based on both the technical content and presentation. The winner will be chosen by the Award Committee comprising of internationally renowned experts in data-driven control and learning.

Submission Notices for Authors: Full papers describing original work and special/invited session proposals should be submitted by March 15, 2021 through the portal http://cms.amss.ac.cn/. Upon acceptance, authors will be required to register and present their papers at DDCLS'21. For further information, please refer to http://eie.usts.edu.cn/ddcls2021/index.html, email chkyin@bjtu.edu.cn.

Important dates

Full Paper & Invited Session Proposals submission

Notification of Acceptance / Rejection

Final Manuscript Submission / Advance Registration

January 31, 2021 March 15, 2021

March 10, 2021 April 2, 2021

March 31, 2021 April 18, 2021





Organized by

Technical Committee on Data Driven Control, Learning and Optimization, Chinese Association of Automation, Beijing Jiaotong University Qingdao University

Sponsored by

IEEE Beijing Section, IEEE Industrial Electronics Society IEEE CIS Beijing Chapter

Locally Organized by

Suzhou University of Science and Technology