DONGDONG YUE (1994-01)

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BIOGRAPHY

Dongdong Yue received the B. Sc. degree in applied mathematics from Hefei University of Technology, Hefei, China, in 2015, and the Ph. D. degree in control science and engineering from Southeast University, Nanjing, China, in 2021. Since July 2021, he has been a postdoctoral researcher with the School of Mathematics, Southeast University. His research interests include adaptive control and optimization of network systems. Dr. Yue, as the first author, has published several papers in leading journals and conferences, and has received the Best Paper in Theory Award from the 18th IEEE International Conference on Networking, Sensing, and Control.

EDUCATION

| Hefei University of Technology (HFUT), B. Sc., Math and Applied Mathematics | 2011.9 - 2015.6 |
|---|-----------------|
| Southeast University (SEU), Master student, Applied Mathematics | 2015.9 - 2017.1 |
| Supervisor: Prof. Jinde Cao | |
| Southeast University, Ph. D., Control Science and Engineering | 2017.3 - 2021.3 |
| Supervisor: Prof. Qi Li, Prof. Jinde Cao; Thesis: Distributed adaptive control of uncertain network systems | |

RESEARCH EXPERIENCES

Southeast University (SEU), School of Mathematis, Postdoc

2021.7 -

Supervisor: Prof. Jinde Cao

Hong Kong University of Science and Technology (HKUST), Ling's Group, *Visiting Researcher* 2023.9 - 2023.12

Host: Prof. Ling Shi

Okayama Prefectural University (OPU, Japan), Xin Lab, Visiting Researcher 2019.5 - 2019.8

Host: Prof. Xin Xin

Delft University of Technology (TUD, The Netherlands), DCSC, *Joint Ph. D.* 2019.10 - 2020.10

Supervisor: Prof. Bart De Schutter, Prof. Simone Baldi

PUBLICATIONS

Research in progress

[1]. **Dongdong Yue**, Simone Baldi, Jinde Cao, and Ling Shi. Adaptive exponential consensus with cooperative exponential parameter identification over leaderless directed graphs. *IEEE Transactions on Control of Network Systems*, submitted.

Journal papers

- [1]. **Dongdong Yue**, Simone Baldi, Jinde Cao, and Bart De Schutter. Model reference adaptive stabilizing control with application to leaderless consensus. *IEEE Transactions on Automatic Control*, accepted.
- [2]. **Dongdong Yue**, Simone Baldi, Jinde Cao, Qi Li, and Bart De Schutter. Distributed adaptive resource allocation: an uncertain saddle-point dynamics viewpoint. *IEEE/CAA Journal of Automatica Sinica*, 10(12): 2209-2221, 2023.

- [3]. **Dongdong Yue**, Simone Baldi, Jinde Cao. Distributed aperiodic time-triggered and event-triggered consensus: a scalability viewpoint. *IEEE Transactions on Network Science and Engineering*, 10(3): 1512-1524, 2023.
- [4]. **Dongdong Yue**, Simone Baldi, Jinde Cao, and Bart De Schutter. Distributed adaptive optimization with weight-balancing. *IEEE Transactions on Automatic Control*, 67(4): 2068-2075, 2022.
- [5]. **Dongdong Yue**, Simone Baldi, Jinde Cao, Qi Li, and Bart De Schutter. A directed spanning tree adaptive control solution to time-varying formations. *IEEE Transactions on Control of Network Systems*, 8(2): 690-701, 2021.
- [6]. **Dongdong Yue**, Jinde Cao, Qi Li, and Qingshan Liu. Neural-network-based fully distributed adaptive consensus for a class of uncertain multiagent systems. *IEEE Transactions on Neural Networks and Learning Systems*, 32(7): 2965-2977, 2021.
- [7]. **Dongdong Yue**, Qi Li, Kil To Chong, and Jinde Cao. Neural-network-embedded distributed average tracking of agents with matching unknown nonlinearities. *Asian Journal of Control*, 23(6): 2628-2641, 2021.
- [8]. **Dongdong Yue**, Jinde Cao, Qi Li, and Mahmoud Abdel-Aty. Distributed neuro-adaptive formation control for uncertain multi-agent systems: node- and edge-based designs. *IEEE Transactions on Network Science and Engineering*, 7(4): 2656-2666, 2020.
- [9]. **Dongdong Yue**, Jinde Cao, Qi Li, and Xinli Shi. Neuro-adaptive consensus strategy for a class of nonlinear time-delay multi-agent systems with an unmeasurable high-dimensional leader. *IET Control Theory & Applications*, 13(2): 230-238, 2019.

Conference papers

- [1]. Meng Tao, **Dongdong Yue**, Jinde Cao, "PID-inspired continuous-time distributed optimization," *Annual Conference of the IEEE Industrial Electronics Society (IECON)*, Marina Bay Sands Expo and Convention Centre, Singapore, 2023, accepted.
- [2]. **Dongdong Yue**, Simone Baldi, and Jinde Cao, "D-MRACO: Decentralized Model Reference Adaptive Controller and Observer," *World Congress of the International Federation of Automatic Control (IFAC World Congress)*, Yokohama, Japan, 2023, accepted.
- [3]. **Dongdong Yue**, Simone Baldi, and Jinde Cao, "Distributed adaptive consensus disturbance rejection: a directed-spanning-tree perspective," *Chinese Control Conference (CCC)*, Hefei, China, 2022.
- [4]. **Dongdong Yue**, Simone Baldi, and Jinde Cao, "Robust model reference adaptive consensus with neural networks," *Chinese Control and Decision Conference (CCDC)*, Hefei, China, 2022.
- [5]. **Dongdong Yue**, Simone Baldi, Wenying Xu and Jinde Cao, "Distributed adaptive consensus via event-triggered sampling: an edge-based method," *IEEE International Conference on Networking, Sensing and Control (ICNSC)*, Xiamen, China, 2021.
- [6]. **Dongdong Yue**, Qi Li, Jinde Cao, and Xuegang Tan. Robust neuro-adaptive asymptotic consensus for a class of uncertain multi-agent systems: an edge-based paradigm. *International Joint Conference on Neural Networks (IJCNN)*, Budapest, Hungary, 2019.
- [7]. Xuegang Tan, Jinde Cao, Rensi Chen, and **Dongdong Yue**. The event-based consensus of multi-agent networks with control gain in normal distribution. *Chinese Control Conference (CCC)*, Guangzhou, China, 2019.

PROJECTS

- China Postdoctoral Science Foundation under Grant BX2021064, 2021.7-2023.7, Distributed adaptive optimization and economic dispatch, ¥630,000
- Fundamental Research Funds for the Central Universities under Grant 3207012201A4, 2022.7-2023.7, Distributed adaptive optimization and economic dispatch with bound constraints, ¥150,000
- Graduate Research and Innovation Program of Jiangsu Province under Grant KYCX19_0086, 2019.3-2020.3,
 Distributed adaptive control of uncertain network systems, ¥30,000

AWARDS

- Outstanding graduates of Class 2015, HFUT (2015.7)
- National Government Scholarship for Studying Abroad, CSC (2019.5)
- Education Foundation Scholarship, SEU (2019.8)
- National Government Scholarship for Ph. D. students (2020.12)
- Best Paper in Theory, ICNSC2021 (2021.12)
- Outstanding PhD thesis of Class of 2022, SEU (2022.6)

YAC 2022, Beijing 2022.11

A directed spanning tree based framework for distributed adaptive control

EXTRA

- Member of IEEE since 2021.9, Member of CAA since 2022.1, Member of CICC since 2022.3.
- Reviewers of journals including IEEE Transactions on Cybernetics, Applied Mathematics and Mechanics, etc.
- Program committee member of conferences including ICIST 2023, IEEE-CYBER 2023.
- Hobbies: basketball, billiard, swimming, piano, guitar, movie.