Siyi Wang

Curriculum Vitae

Technical University of Munich Munich, 80333, Germany https://siyiwang1996.github.io/ ⊠ siyi.wang@tum.de



Education

- Oct.2019 **Ph.D. candidate**, Chair of Infomation-oriented Control (ITR). Technical University of Munich (TUM) Supervisor: Prof. Sandra Hirche
- 2017 2019 **M.Sc., Control Science and Engineering**. School of Astronautics, Harbin Institute of Technology (HIT), Harbin Supervisor: Prof. Ligang Wu
- 2013 2017 **B.Eng., Building Electricity and Intelligence**. Schoold of Electricity Engineering and Automation, HIT, Harbin

Research interests

- Value of Information in control
- Stochastic control
- Risk-averse learning

Research experiences

- Jan.2022 Participate in "6G-Life" program funded by the Federal Ministry of Education and present Research of Germany
- Oct.2019 Participate in DFG Priority Programme "Cyber-Physical Networking (SPP 1914)" Oct.2023

Journal paper

- **Siyi Wang**, Yulong Gao, and Sandra Hirche: Optimal transmission power scheduling for networked control system under DoS attack, IEEE Transaction on Industrial Cyber-Physical System. 2025
- Ligang Wu, **Siyi Wang**, Yabin Gao, Jianxing Liu and Guanghui Sun: Constrained sliding mode control of MIMO nonlinear systems. SCIENTIA SINICA Informationis 51 (3), 2021
- **Siyi Wang**, Yabin Gao, Jianxing Liu and Ligang Wu: Saturated sliding mode control with limited magnitude and rate. IET Control Theory and Applications 12 (8), 2018, 1075-1085
- Zhenyi Yuan, Yunfei Yin, Jianxing Liu, **Siyi Wang** and Ligang Wu, Trajectory tracking control of a four mecanum wheeled mobile platform: an extended state observer-based sliding mode approach, *IET Control Theory and Applications*, 2020, 14(3): 415-426

Conference papers

• Siyi Wang and Sandra Hirche: Value of information in networked control systems subject to delay and packet dropouts. 2023 62th IEEE CDC, 2023

- Zifan Wang, Yulong Gao, **Siyi Wang**, Micheal Zavlanos, Alessandro Abate and Karl H. Johansson, Policy evaluation in distributional LQR. L4DC, 2023
- **Siyi Wang**, Qingchen Liu, Precious U. Abara, John S. Baras and Sandra Hirche: Value of information in networked control systems subject to delay. 2021 60th IEEE CDC, 2021
- Yunfei Yin, Jianxing Liu, **Siyi Wang**, Hao Lin, S. Vazquez, L. G. Franquelo and Ligang Wu, Backstepping control of a DC-DC boost converters under unknown disturbances, *IECON 2018-44th Annual Conference of the IEEE Industrial Electronics Society*,.

Scholarship & Honors

- 2024 TUM Graduate school travel grant, TUM
- 2017, 2019 Outstanding graduate, HIT
- 2017 2019 Postgraduates scholarship, first class, HIT Special scholarship for recommended postgraduates, second class, HIT
 - 2014 National scholarship for undergraduate, Ministry of Education, PR China
 - 2012 Third prize (Jiangxi division), Chinese Mathematical Olympiad

Teaching experiences

- 2019 2023 Robotic control laboratory, teaching assistant, winter semester
- 2022, 2023 Advanced seminar on networked system and control, tutor, winter semester
- 2019 2024 Student supervision: 4 research internship, 2 bachelor thesis and 2 master thesis