

Lifeng Zhou

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Education

Virginia Tech, Blacksburg, USA

Ph.D. in Electrical & Computer Engineering, August 2016–Present
Advisor: Pratap Tokekar

Shanghai Jiao Tong University, Shanghai, China

M.S. in Control Science & Engineering, September 2013
Advisor: Shaoyuan Li

Huazhong University of Science & Technology, Wuhan, China

B.S. in Automation, September 2009

Experience

Research Assistant, August 2016–Present

Dept. of Electrical & Computer Engineering, Virginia Tech, Blacksburg, USA
Advisor: Pratap Tokekar

Research Assistant, September 2013–March 2016

Key Laboratory of System Control & Information Processing, Shanghai, China
Advisor: Shaoyuan Li

Research Intern, January 2015–March 2015

GE China Power Conversion, Shanghai, China
Group Leader: Polly Xu

Research Assistant, July 2012–September 2012

Key Laboratory of Industrial Automation, Wuhan, China
Advisor: Anwen Shen

Teaching

Teaching Assistant

Dept. of Electrical & Computer Engineering, Virginia Tech, Blacksburg, USA
ECE 4405: Control Systems, Fall 2016

Publications

Journal Articles

Under Review

[J6] Z. Zhang, **L. Zhou** and P. Tokekar, “Strategies to Inject Spoofed Measurement Data,” *IEEE Transactions on Automatic Control*, Note: submitted.

Published and Accepted

[J5] **L. Zhou**, and P. Tokekar, “Sensor Assignment Algorithms to Improve Observability while Tracking Targets,” *IEEE Transactions on Robotics (T-RO)*, 2019, Note: to appear.

[J4] **L. Zhou**, V. Tzoumas, G. J. Pappas and P. Tokekar, “Resilient Active Target Tracking with Multiple Robots,” *IEEE Robotics and Automation Letters* and *IEEE International Conference on Robotics and Automation (RA-L+ICRA)*, 2019.

- [J3] **L. Zhou**, and P. Tokekar, “Active Target Tracking with Self-Triggered Communications in Multi-Robot Teams,” *IEEE Transactions on Automation Science and Engineering (T-ASE)*, 2018.
- [J2] **L. Zhou**, and S. Li, “Distributed model predictive control for multi-agent flocking via neighbor screening optimization,” *International Journal of Robust and Non-linear Control*, 27(9): pp. 1690-705, 2017.
- [J1] **L. Zhou**, and S. Li, “Distributed model predictive control for consensus of sampled-data multi-agent systems with double-integrator dynamics,” *IET Control Theory & Applications*, 9(12): pp. 1774-80, 2015.

Refereed Conference Articles

- [C6] **L. Zhou**, and P. Tokekar, “An Approximation Algorithm for Distributed Resilient Submodular Maximization,” *The 2nd International Symposium on Multi-Robot and Multi-Agent Systems (MRAS)*, 2019, Note: Accepted as Extended Abstract.
- [C5] Z. Zhang, J. Lee, J. M. Smereka, Y. Sung, **L. Zhou** and P. Tokekar, “Minimizing detectability and maximizing visibility,” *IEEE International Conference on Robotics and Automation (ICRA)*, 2019.
- [C4] **L. Zhou**, and P. Tokekar, “An Approximation Algorithm for Risk-averse Submodular Optimization,” *Workshop on the Algorithmic Foundations of Robotics (WAFR)*, 2018.
- [C3] Z. Zhang, **L. Zhou**, and P. Tokekar, “Strategies to Design Signals to Spoof Kalman Filter,” *IEEE American Control Conference (ACC)*, 2018.
- [C2] **L. Zhou**, and P. Tokekar, “Active Target Tracking with Self-Triggered Communications,” *IEEE International Conference on Robotics and Automation (ICRA)*, 2017.
- [C1] **L. Zhou**, and S. Li, “Cooperative control of linear systems with coupled constraints via distributed model predictive control,” *IEEE Chinese Control Conference (CCC)*, 2015.

Refereed Workshop Publications

- [W2] **L. Zhou** and P. Tokekar, “An Approximation Algorithm for Distributed Resilient Submodular Maximization,” *IEEE International Conference on Robotics and Automation (ICRA) Workshop on Resilient Robot Teams: Composing, Acting, and Learning*, 2019.
- [W1] **L. Zhou** and P. Tokekar, “A Lower Bound on Observability for Target Tracking with Range Sensors and its Application to Sensor Assignment,” *IEEE International Conference on Robotics and Automation (ICRA) Workshop on Multi-robot Perception-driven Control and Planning*, 2017.

Review

TRO, RAL, JFR, RAS, JFI, ToC, ICRA, IROS, WARF, ACC

Honors

Graduate Fellowship

Research Assistant Scholarships, Virginia Tech, Blacksburg, USA, Fall 2016–Present
National Scholarship of China (1/121), Shanghai Jiao Tong University, Shanghai, China, 2015

Undergraduate Fellowship

National Endeavor Fellowship of China (3%), Huazhong University of Science & Technology, Wuhan, China, 2010