# 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

 $Under\ Review$ 

[J8] L. Zhou, V. Tzoumas, G. J. Pappas and P. Tokekar, "Resilient Active Target Tracking with Multiple Robots," *IEEE Robotics and Automation Letters (RA-L)*, Note: Submitted.

[J7] Z. Zhang, J.Lee, JM Smereka, Y. Sung, **L. Zhou** and P. Tokekar, "Minimizing detectability and maximizing visibility," *IEEE Robotics and Automation Letters* (RA-L), Note: Submitted.

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

[J5] L. Zhou, and P. Tokekar, "Sensor Assignment Algorithms to Improve Observability while Tracking Targets," IEEE Transactions on Robotics, Note: Submitted.

#### Published

- [J4] L. Zhou, and P. Tokekar, "Active Target Tracking with Self-Triggered Communications in Multi-Robot Teams," *IEEE Transactions on Automation Science and Engineering*, Note: To Appear.
- [J3] **L. Zhou**, and S. Li, "Distributed model predictive control for multi-agent flocking via neighbor screening optimization," *International Journal of Robust and Nonlinear Control*, 27(9): pp. 1690-705, 2017.
- [J2] 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.
- [J1] L. Peng, A. Shen, N. Zhang and L. Zhou, "Application of Industrial Embedded System Upgrade Technology Based on Wireless IAP," *Instrument Technique and Sensor*, No. 12, 2013.

#### Refereed Conference Publications

- [C4] L. Zhou, and P. Tokekar, "An Approximation Algorithm for Risk-averse Submodular Optimization," Workshop on the Algorithmic Foundations of Robotics (WAFR 2018). Note: To Appear.
- [C3] Z. Zhang, **L. Zhou**, and P. Tokekar, "Strategies to Design Signals to Spoof Kalman Filter," *IEEE American Control Conference (ACC 2018)*, 2018. Note: To Appear.
- [C2] L. Zhou, and P. Tokekar, "Active Target Tracking with Self-Triggered Communications," *IEEE International Conference on Robotics and Automation (ICRA 2017)*, 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), 2015.

# Refereed Workshop Publications

[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 2017) Workshop on Multirobot Perception-driven Control and Planning*, 2017.

#### Review

TRO, JFR, JFI, ICRA, IROS

### 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 (3/226), Huazhong University of Science & Technology, Wuhan, China, 2010

References Available Upon Request (Last updated: September 19, 2018)