

Education	Nanyang Technological University, Singapore Doctor of Philosophy (PhD), Electrical and Electronic Engineering <ul style="list-style-type: none">- Thesis: Augmented Distributed Optimization for Networked Systems- Advisor: Prof. Yeng Chai Soh (Co: Prof. Lihua Xie) Shandong University, Jinan, China Bachelor of Science (BSc), Mechanical Engineering <ul style="list-style-type: none">- Ranking: 9/204- Excellent Undergraduate Thesis Award (<i>top 5%</i>), 2009	2011-2016 2005-2009
Research Interests	<ul style="list-style-type: none">- Distributed optimization- Cyber security of networked systems- Large-scale signal processing and machine learning	
Academic Positions	<ul style="list-style-type: none">- Postdoctoral Scholar, <i>Arizona State University</i>, Phoenix, USA, 10/2017-Present,- Research Fellow, <i>Nanyang Technological University</i>, Singapore, 8/2016-9/2017,- Project Officer, <i>Nanyang Technological University</i>, Singapore, 8/2015-7/2016,- Research Assistant, <i>Zhejiang University</i>, China, 9/2009-8/2011.	
Honors & Awards	<ul style="list-style-type: none">- NTU RSS Scholarship, 2011- Excellent Undergraduate Thesis Award (<i>top 5%</i>), 2009- Outstanding Student Scholarship (<i>top 5%</i>), 2006-2008	
Project Experience	<p>Distributed Optimization for Sensor Networks [J1, 2, 6; C2, 3, 4, 6] 5/2013-Present</p> <ul style="list-style-type: none">- Developed <i>several novel distributed algorithms</i> for multi-agent optimization problems,- Achieved the <i>best convergence rates</i> for these proposed algorithms,- Applied to large-scale (stochastic) networks for sensor fusion and resource allocation. <p>Distributed Optimization for Networked Systems [J3; C1] 8/2011-8/2015</p> <ul style="list-style-type: none">- Designed a <i>new distributed derivative-free scheme</i> for networked dynamic optimization,- Proposed a <i>primal-dual</i> extremum seeking approach accounting for <i>unknown constraints</i>,- Applied the proposed scheme to wind farms for energy maximization. <p>Occupancy Modeling for Optimal HVAC Control [J4] 9/2012-5/2013</p> <ul style="list-style-type: none">- Proposed <i>new stochastic models</i> for occupancy modeling and prediction,- Designed <i>distributed model predictive control schemes</i> for large-scale HVAC systems.	
Publications	Journal Articles	
	J1 Jinming Xu , Shanying Zhu, Yeng Chai Soh and Lihua Xie, "A Bregman Splitting Scheme for Distributed Optimization over Networks," conditionally accepted by <i>IEEE Transactions on Automatic Control</i> (Regular), 2017: http://arxiv.org/abs/1608.08031 .	
	J2 Jinming Xu , Shanying Zhu, Yeng Chai Soh and Lihua Xie, "Convergence of Asynchronous Distributed Gradient Methods over Stochastic Networks," <i>IEEE Transactions on Automatic Control</i> (Regular), online available, 2017.	

- J3 **Jinming Xu** and Yeng Chai Soh, “A Distributed Simultaneous Perturbation Approach for Large-scale Dynamic Optimization Problems,” *Automatica* 72 (2016): 194-204 (Regular).
- J4 Zhenghua Chen, **Jinming Xu**, Yeng Chai Soh, “Modeling Regular Occupancy in Commercial Buildings Using Stochastic Models”, *Energy and Buildings* 103 (2015): 216-223.
- J5 Shanying Zhu, Cailian Chen, **Jinming Xu**, Lihua Xie and Johansson Karl Henrik, “Mitigating Quantization Effects on Distributed Sensor Fusion: A Least Squares Approach,” revised and re-submitted, 2017.
- J6 **Jinming Xu**, Shanying Zhu, Yeng Chai Soh and Lihua Xie, “A Dual Splitting Approach for Distributed Resource Allocation with Regularization,” submitted, 2017.

Conference Proceedings

- C6 **Jinming Xu**, Shanying Zhu, Yeng Chai Soh and Lihua Xie, “A Dual Splitting Algorithm for Distributed Resource Allocation Problems,”, 56th CDC, to appear, 2017.
- C5 Shanying Zhu, **Jinming Xu**, Cailian Chen, Xinpeng Guan and Binqiang Xue, “DINS: A Scheme for Distributed Sensor Fusion over Fading Channels,” accepted by *International Federation of Automatic Control (IFAC)*, 2017.
- C4 **Jinming Xu**, Shanying Zhu, Yeng Chai Soh and Lihua Xie, “A Forward-Backward Bregman Splitting Scheme for Regularized Distributed Optimization Problems,” In *Proceedings of 55th IEEE Conference on Decision and Control (CDC)*, 2016.
- C3 Shanying Zhu, **Jinming Xu**, Cailian Chen and Xinpeng Guan, “A Least Square Approach for Distributed Sensor Fusion in Bandwidth-constrained Sensor Networks,” In *Proceedings of 41st IEEE Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2016.
- C2 **Jinming Xu**, Shanying Zhu, Yeng Chai Soh and Lihua Xie, “Augmented Distributed Gradient Methods for Multi-agent Optimization under Uncoordinated Constant Stepsizes,” In *Proceedings of 54th IEEE Conference on Decision and Control (CDC)*, 2015.
- C1 **Jinming Xu** and Yeng Chai Soh, “Distributed Extremum Seeking Control of Networked Large-scale Systems under Constraints,” In *Proceedings of 52nd IEEE Conference on Decision and Control (CDC)*, 2013.

Professional Activities

- Publication Reviewing:
IEEE TAC • IEEE TCNS • SIOPT • NetSys • CDC • etc.
- Memberships: IEEE Member (since 2011) • IEEE Control Systems Society (since 2013).