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RESEARCH INTERESTS

Multi-agent systems; Optimization algorithms; Control and autonomy; Distributed computing

EMPLOYMENT

Assistant Professor of Electrical and Computer Engineering University of Illinois Chicago	08/2017–present
Postdoctoral Researcher in Electrical and Systems Engineering University of Pennsylvania, Philadelphia, PA Hosts: George J. Pappas and Ufuk Topcu	10/2013–07/2017

EDUCATION

Ph.D. in Electrical Engineering California Institute of Technology, Pasadena, CA Advisor: Richard M. Murray Thesis: <i>Optimal uncertainty quantification via convex optimization and relaxation</i>	06/2014
M.S. in Electrical Engineering California Institute of Technology, Pasadena, CA	06/2008
M.E. in Electronic Engineering with high distinction Tsinghua University, Beijing, China	07/2006
B.E. in Electronic Engineering Tsinghua University, Beijing, China	07/2003

SELECTED HONORS AND AWARDS

Fellow, Scialog: Automating Chemical Laboratories	2023
Invited Participant, DARPA AI Forward Workshop	2023
Faculty Advising Award (for undergraduate advising), College of Engineering, UIC	2019
Graduation Day Speaker, Information Theory and Applications Workshop	2015
Best Student Paper Award Finalist, American Control Conference	2013
Atwood Fellowship, Electrical Engineering, Caltech	2006–2007

PUBLICATIONS

Preprints

- [1] Haoxiang Ma, Shuo Han, Ahmed Hemida, Charles A. Kamhoua, and Jie Fu, “Adaptive incentive design for Markov decision processes with unknown rewards,” Aug. 2024.
- [2] Shuo Wu, Haoxiang Ma, Jie Fu, and Shuo Han, “Robust reward design for Markov decision processes,” Jun. 2024.

Journal Publications

- [1] Chongyang Shi, Shuo Han, Michael Dorothy, and Jie Fu, “Active perception with initial-state uncertainty: A policy gradient method,” *IEEE Control Systems Letters*, vol. 8, pp. 3147–3152, 2024, ISSN: 2475-1456. DOI: 10.1109/LCSYS.2024.3513896.
- [2] Songyang Han, Sanbao Su, Sihong He, Shuo Han, Haizhao Yang, Shaofeng Zou, and Fei Miao, “What is the solution for state-adversarial multi-agent reinforcement learning?” *Transactions on Machine Learning Research*, Feb. 2024.
- [3] Haoxiang Ma, Shuo Han, Charles A. Kamhoua, and Jie Fu, “Optimizing sensor allocation against attackers with uncertain intentions: A worst-case regret minimization approach,” *IEEE Control Systems Letters*, vol. 7, pp. 2863–2868, 2023, ISSN: 2475-1456. DOI: 10.1109/LCSYS.2023.3290489.
- [4] Sihong He, Songyang Han, Sanbao Su, Shuo Han, Shaofeng Zou, and Fei Miao, “Robust multi-agent reinforcement learning with state uncertainty,” *Transactions on Machine Learning Research*, Jun. 2023.
- [5] Sihong He, Zhili Zhang, Shuo Han, Lynn Pepin, Guang Wang, Desheng Zhang, John A. Stankovic, and Fei Miao, “Data-driven distributionally robust electric vehicle balancing for autonomous mobility-on-demand systems under demand and supply uncertainties,” *IEEE Transactions on Intelligent Transportation Systems*, vol. 24, no. 5, pp. 5199–5215, May 2023, ISSN: 1558-0016. DOI: 10.1109/TITS.2023.3237804.
- [6] Sumukha Udupa, Abhishek N. Kulkarni, Shuo Han, Nandi O. Leslie, Charles A. Kamhoua, and Jie Fu, “Synthesizing attack-aware control and active sensing strategies under reactive sensor attacks,” *IEEE Control Systems Letters*, vol. 7, pp. 265–270, 2023, ISSN: 2475-1456. DOI: 10.1109/LCSYS.2022.3187313.
- [7] Shuo Han, “Gradient methods with dynamic inexact oracles,” *IEEE Control Systems Letters*, vol. 5, no. 4, pp. 1163–1168, Oct. 2021.
- [8] Fei Miao, Sihong He, Lynn Pepin, Shuo Han, Abdeltawab Hendawi, Mohamed E Khalefa, John A. Stankovic, and George Pappas, “Data-driven distributionally robust optimization for vehicle balancing of mobility-on-demand systems,” *ACM Transactions on Cyber-Physical Systems*, vol. 5, no. 2, Jan. 2021, ISSN: 2378-962X. DOI: 10.1145/3418287.
- [9] Shuo Han, “Systematic design of decentralized algorithms for consensus optimization,” *IEEE Control Systems Letters*, vol. 3, no. 4, pp. 966–971, Oct. 2019.
- [10] Fei Miao, Shuo Han, Shan Lin, Qian Wang, John Stankovic, Abdeltawab Hendawi, Desheng Zhang, Tian He, and George J. Pappas, “Data-driven robust taxi dispatch under demand uncertainties,” *IEEE Transactions on Control Systems Technology*, vol. 27, no. 1, pp. 175–191, Jan. 2019.
- [11] Shuo Han and George J. Pappas, “Privacy in control and dynamical systems,” *Annual Review of Control, Robotics, and Autonomous Systems*, vol. 1, no. 1, 2018.

- [12] Fragkiskos Koufogiannis, Shuo Han, and George J. Pappas, “Gradual release of sensitive data under differential privacy,” *Journal of Privacy and Confidentiality*, vol. 7, no. 2, pp. 23–52, 2017.
- [13] Shuo Han, Ufuk Topcu, and George J. Pappas, “Differentially private distributed constrained optimization,” *IEEE Transactions on Automatic Control*, vol. 62, no. 1, pp. 50–64, 2017.
- [14] Fei Miao, Shuo Han, Shan Lin, John A. Stankovic, Desheng Zhang, Sirajum Munir, Hua Huang, Tian He, and George J. Pappas, “Taxi dispatch with real-time sensing data in metropolitan areas: A receding horizon control approach,” *IEEE Transactions on Automation Science and Engineering*, vol. 13, no. 2, pp. 463–478, 2016.
- [15] Shuo Han, Victor M. Preciado, Cameron Nowzari, and George J. Pappas, “Data-driven network resource allocation for controlling spreading processes,” *IEEE Transactions on Network Science and Engineering*, vol. 2, no. 4, pp. 127–138, 2015.
- [16] Shuo Han, Molei Tao, Ufuk Topcu, Houman Owhadi, and Richard M. Murray, “Convex optimal uncertainty quantification,” *SIAM Journal on Optimization*, vol. 25, no. 3, pp. 1368–1387, 2015.

Peer-Reviewed Conference Publications

- [1] Haoxiang Ma, Chongyang Shi, Shuo Han, Michael Dorothy, and Jie Fu, “Covert planning against imperfect observers,” in *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, May 2024.
- [2] Yansong Li and Shuo Han, “Efficient collaboration with unknown agents: Ignoring similar agents without checking similarity,” in *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, May 2024, (extended abstract).
- [3] Haoxiang Ma, Shuo Han, Chales Kamhoua, and Jie Fu, “Optimal resource allocation for proactive defense with deception in probabilistic attack graphs,” in *Conference on Decision and Game Theory for Security (GameSec)*, Oct. 2023.
- [4] Sihong He, Yue Wang, Shuo Han, Shaofeng Zou, and Fei Miao, “A robust and constrained multi-agent reinforcement learning framework for electric vehicle AMoD systems,” in *IEEE/RSJ International Conference on Intelligent Robots and Systems*, Oct. 2023.
- [5] Sihong He, Shuo Han, and Fei Miao, “Robust electric vehicle balancing of autonomous mobility-on-demand system: A multi-agent reinforcement learning approach,” in *IEEE/RSJ International Conference on Intelligent Robots and Systems*, Oct. 2023.
- [6] Yansong Li and Shuo Han, “Solving strongly convex and smooth Stackelberg games without modeling the follower,” in *American Control Conference*, May 2023.
- [7] Lening Li, Haoxiang Ma, Shuo Han, and Jie Fu, “Synthesis of proactive sensor placement in probabilistic attack graphs,” in *American Control Conference*, May 2023.
- [8] Chongyang Shi, Shuo Han, and Jie Fu, “Quantitative planning with action deception in concurrent stochastic games,” in *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, May 2023.
- [9] Yansong Li and Shuo Han, “Accelerating Model-Free Policy Optimization Using Model-Based Gradient: A Composite Optimization Perspective,” in *Proceedings of The 4th Annual Learning for Dynamics and Control Conference*, PMLR, Jun. 2022, pp. 304–315.
- [10] Abhishek Kulkarni, Shuo Han, Nandi Leslie, Charles Kamhoua, and Jie Fu, “Qualitative planning in imperfect information games with active sensing and reactive sensor attacks: Cost of unawareness,” in *IEEE Conference on Decision and Control*, Dec. 2021.

- [11] Jieren Deng, Chenghong Wang, Xianrui Meng, Yijue Wang, Ji Li, Sheng Lin, Shuo Han, Fei Miao, Sanguthevar Rajasekaran, and Caiwen Ding, "A secure and efficient federated learning framework for NLP," in *Conference on Empirical Methods in Natural Language Processing*, Nov. 2021.
- [12] Shuo Han, "Computational convergence analysis of distributed gradient tracking for smooth convex optimization using dissipativity theory," in *American Control Conference*, Jul. 2019.
- [13] Shuo Han, Ufuk Topcu, and George J. Pappas, "Quantification on the efficiency gain of automated ridesharing services," in *American Control Conference*, 2017.
- [14] Fei Miao, Shuo Han, Abdeltawab Hendawi, Mohamed E. Khalefa, John A. Stankovic, and George J. Pappas, "Data-driven distributionally robust vehicle balancing with dynamic region partition," in *ACM/IEEE International Conference on Cyber-Physical Systems*, 2017.
- [15] Jorge Cortés, Geir E. Dullerud, Shuo Han, Jerome Le Ny, Sayan Mitra, and George J. Pappas, "Differential privacy in control and network systems," in *IEEE Conference on Decision and Control*, 2016, (tutorial paper).
- [16] Shuo Han, Ufuk Topcu, and George J. Pappas, "Event-based information-theoretic privacy: A case study of smart meters," in *American Control Conference*, 2016.
- [17] Jie Fu, Shuo Han, and Ufuk Topcu, "Optimal control in Markov decision processes via distributed optimization," in *IEEE Conference on Decision and Control*, 2015.
- [18] Fei Miao, Shuo Han, Shan Lin, and George J. Pappas, "Taxi dispatch under model uncertainties," in *IEEE Conference on Decision and Control*, 2015.
- [19] Shuo Han, Ufuk Topcu, and George J. Pappas, "A sublinear algorithm for barrier-certificate-based data-driven model validation of dynamical systems," in *IEEE Conference on Decision and Control*, 2015.
- [20] Shuo Han, Ufuk Topcu, and George J. Pappas, "An approximately truthful mechanism for electric vehicle charging via joint differential privacy," in *American Control Conference*, 2015.
- [21] Shuo Han, Ufuk Topcu, and George J. Pappas, "Differentially private distributed protocol for electric vehicle charging," in *Annual Allerton Conference on Communication, Control, and Computing*, 2014.
- [22] Shuo Han, Ufuk Topcu, and George J. Pappas, "Differentially private convex optimization with piecewise affine objectives," in *IEEE Conference on Decision and Control*, 2014.
- [23] Fragkiskos Koufogiannis, Shuo Han, and George J. Pappas, "Computation of privacy-preserving prices in smart grids," in *IEEE Conference on Decision and Control*, 2014.
- [24] Shuo Han, Ufuk Topcu, Molei Tao, Houman Owhadi, and Richard M. Murray, "Convex optimal uncertainty quantification: Algorithms and a case study in energy storage placement for power grids," in *American Control Conference*, 2013, **Best Student Paper Finalist**.
- [25] Shuo Han and Richard M. Murray, "Containment indicator function construction via numerical conformal mapping," in *IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2011.
- [26] Shuo Han, Andrea Censi, Andrew D. Straw, and Richard M. Murray, "A bio-plausible design for visual pose stabilization," in *IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2010.
- [27] Andrea Censi, Shuo Han, Sawyer B. Fuller, and Richard M. Murray, "A bio-plausible design for visual attitude stabilization," in *IEEE Conference on Decision and Control*, 2009.

- [28] Shuo Han, Andrew D. Straw, Michael H. Dickinson, and Richard M. Murray, “A real-time helicopter testbed for insect-inspired visual flight control,” in *IEEE International Conference on Robotics and Automation*, 2009.

RESEARCH SUPPORT

Ongoing

DARPA, *Game-Theoretic Reasoning and Synthesis of Defense with Strategic Deception and Counter-Deception*, \$500,000, 03/2022–02/2025

PI: Jie Fu (UFL)

Role: UIC PI. Share: \$150,000.

NSF, *Institute for Data, Econometrics, Algorithms and Learning (IDEAL)*, \$3,180,000, 09/2022–08/2027

PI: Avrim Blum (TTIC), Chao Gao (UChicago), Chun Liu (IIT), Lev Reyzin (UIC), Aravindan Vijayaraghavan (Northwestern)

Role: Senior Personnel. Share: \$84,000.

Pending

NSF, *CAREER: Fast and Deployable Policy Search Methods for Reinforcement Learning*, \$550,454, 03/2025–02/2030

PI: Shuo Han

ARL, Early Career Program, *Long-Term Cyber Deception Against Unpredictable and Sophisticated Attackers*, \$990,000, 05/2024–04/2029

PI: Shuo Han

Completed

NSF, *HDR TRIPODS: UIC Foundations of Data Science Institute*, \$1,500,000, 01/2020–12/2022

PI: Lev Reyzin (UIC)

Role: Senior Personnel. Share: \$100,000.

UIC Discovery Partners Institute (DPI) Seed Fund, *Control of High-Speed Autonomous Vehicles in Complex Environments Using Onboard Computing*, \$100,000, 07/2019–06/2021

Role: PI. Share: \$50,000.

TEACHING EXPERIENCE

University of Illinois Chicago:

ECE 508 Convex Optimization (Fall 2022–2024). Previously offered as ECE 594 in Fall 2019–2021.

ECE 550 Linear Systems Theory and Design (Spring 2018–2024)

ECE 451 Control Engineering (Fall 2017, Fall 2018)

ENGR 494 Autonomous Vehicles (guest lecturer, Spring 2019)

University of Pennsylvania:

ESE 605 Modern Convex Optimization (Spring 2017)

ADVISING

PhD Students (as Advisor/Co-Advisor)

Current:

Yansong Li, UIC, 01/2021–present

Shuo Wu, UIC, 08/2022–present

Zeyu Dong, Stony Brook University, 01/2024–present

Former:

Haoxiang Ma, University of Florida, 08/2021–06/2024 (co-advised with Jie Fu)

Fragkiskos Koufogiannis, University of Pennsylvania, 2013–2017 (as research mentor)

Thesis: *Privacy In Multi-Agent And Dynamical Systems*

Placement after graduation: United Technologies Research Center

Fei Miao, University of Pennsylvania, 2014–2016 (as research mentor)

Thesis: *Data-Driven Dynamic Robust Resource Allocation*

Charles Hallac and Sarah Keil Wolf Award (Best Doctoral Dissertation Award in ESE), 2016

Placement after graduation: Assistant Professor, University of Connecticut

MS Students (as Advisor/Co-Advisor)

Former:

Paolo Ceppi, UIC, 08/2021–05/2022

Placement after graduation: Airbus

Peng Zou, UIC, 06/2020–05/2021

Placement after graduation: PhD program in Computer Science, UIC

Eleonora D'Alessandro, UIC/Politecnico di Torino, 12/2019–09/2020

Thesis: *Imitation Learning for Autonomous Highway Merging with Safety Guarantees*

Nominated for the Outstanding Thesis and Dissertation Award at the Graduate College

Placement after graduation: Start-up (in stealth mode)

Graduate Students (as Thesis Committee Member)

Usama Muneeb, PhD, UIC, Exam Date: 11/08/2024

Thesis: *Induced Model Matching: Learning from Restricted Models*

Zhanibek Rysbek, PhD, UIC, 11/2023

Thesis: *Human-Inspired Robot Control for Proactive Physical Human-Robot Interaction*

Yangqing Liu, PhD, UIC, 03/2022

Thesis: *Stochastic Methods and Convex Optimization in Electromagnetic Inverse Scattering*

Matteo Pallomo, MS, UIC/Politecnico di Torino, 05/2019

Thesis: *A Framework for Robotic Grasping and Handover with an Underactuated Three-Fingered Hand*

Michele Giovanni Calvi, MS, UIC/Politecnico di Torino, 12/2018

Thesis: *Runtime Monitoring of Cyber-Physical Systems Using Data-Driven Models*

Graduate Students (as Preliminary Exam Committee Member)

Rushit Shah, PhD, UIC, Exam Date: 11/11/2024

Proposal: *Multiobjective Imitation Learning via Subdominance-Minimization*

Yansong Li, PhD, UIC, Exam Date: 11/21/2023

Proposal: *Collaborating With Unknown Partners Using Reinforcement Learning*

Usama Muneeb, PhD, UIC, Exam Date: 03/31/2023

Proposal: *On Structure in Natural Language: Learning More From Less*

Zhanibek Rysbek, PhD, UIC, Exam Date: 12/17/2021

Proposal: *Left or Right? Negotiation in Physical Human-Robot Interaction*

Hongyi Pan, PhD, UIC, Exam Date: 10/14/2021

Proposal: *Computationally Efficient Methods for Machine Learning with Application to Wildfire Detection*

Siyao Li, PhD, UIC, Exam Date: 12/18/2020

Proposal: *On Fading Broadcast Channels with Channel Output Feedback*

Visiting Graduate Students

Former:

Sheng Long, Visiting PhD Student, Northwestern University, 05/2023–12/2023

Undergraduate Students

Current:

Zelin Wu, Undergraduate Researcher, Southern University of Science and Technology (China), 06/2023–present

Yuxiang Zhou, Undergraduate Researcher, Southern University of Science and Technology (China), 06/2023–present

Former:

Xinyi Wei, Undergraduate Researcher, Southern University of Science and Technology (China), 06/2022–05/2023

Placement after graduation: PhD program in ECE, University of Florida

Guanda Chen, Undergraduate Researcher, Southern University of Science and Technology (China), 06/2022–11/2022

Junze Deng, Undergraduate Researcher, Southern University of Science and Technology (China), 06/2021–05/2022

Placement after graduation: PhD program in ECE, Ohio State University

Chongyang Shi, Undergraduate Researcher, Southern University of Science and Technology (China), 06/2021–05/2022

Placement after graduation: PhD program in ECE, University of Florida

Philip Korus, Abhiishek Muralidhar, JuanCarlos Paez, Senior Design, UIC, 10/2021–05/2022

Project Title: *Stabilization of Rocket with Canards*

Amanda Martinez, Marvin Rivera, Juan Saavedra, Abigail Villanueva, Senior Design, UIC, 10/2020–05/2021

Project Title: *Walker with Standing Assist*

Emily Chen, Chloé le Comte, Allison Higgins, Lina Huang, Senior Design, University of Pennsylvania, 2015–2016

Project Title: *Going Viral: Resource Allocation Planning Tool for Infectious Diseases*
Societal Impact Award from the ESE department, 2016

PROFESSIONAL SERVICE

Editorial Board Memberships

Conference Editorial Board, IEEE Control Systems Society, 2022–present

Conference Invited Session Organizer

Privacy in Systems and Control, American Control Conference, 2016

Co-organizer: George J. Pappas

Privacy in Systems and Control, IEEE Conference on Decision and Control, 2014

Co-organizers: Jerome Le Ny and George J. Pappas

Reviewer

Journals

ACM Transactions on Cyber-Physical Systems

Annual Reviews in Control

Automatica

European Journal of Operational Research

IEEE Control Systems Letters

IEEE Open Journal of Control Systems

IEEE Transactions on Automatic Control

IEEE Transactions on Control of Network Systems

IEEE Transactions on Pattern Analysis and Machine Intelligence

IEEE Transactions on Power Systems

IEEE Robotics and Automation Letters

IEEE Transactions on Signal Processing

Information and Inference: A Journal of the IMA

Transportation Research Part D: Transport and Environment

Conferences

ACM/IEEE International Conference on Cyber-Physical Systems (ICCPs)

ACM International Conference on Hybrid Systems: Computation and Control (HSCC)

American Control Conference (ACC)

Conference on Neural Information Processing Systems (NeurIPS)

IEEE Conference on Decision and Control (CDC)

IEEE International Conference on Robotics and Automation (ICRA)

IEEE International Conference on Smart Grid Communications (SmartGridComm)

International Conference on Machine Learning (ICML)

International Federation of Automatic Control (IFAC) World Congress

Learning for Dynamics and Control Conference (L4DC)

University Service

Committee member, ECE diversity, equity, and inclusion (DEI) committee, 2022–2023
Committee member, ECE tenure-track faculty search committee, 2018–2020
Committee member, ECE curriculum committee, 2022–2024
Committee member, ECE graduate admission and recruitment committee, 2020–2022, 2023–2024
Committee member, ECE undergraduate committee, 2017–2018, 2019–2020, 2024–2025
Committee member, ECE graduate committee, 2018–2019
Organizer, ECE departmental seminar, 2021–2022

Community Engagement

Participant, IDEAL High School Teacher Workshop, 05/2023
Judge, SIMIODE Challenge Using Differential Equations Models, 2021. (*SIMIODE is a Community of Practice focused on a modeling first method of teaching differential equations, funded in part by the National Science Foundation.*)
Judge, UIC Impact & Research Week, 2021

INVITED TALKS

1. “Robust Incentive Design for Non-Myopic Followers,” Midwest Workshop on Control and Game Theory, Northwestern University, 04/2024.
2. “Robust Incentive Design for Non-Myopic Followers,” Workshop on Cognition and Control, University of Florida, 01/2024.
3. “Strategic Influencing in Multi-Agent Systems,” Frontiers of Data Science Seminar, Illinois Institute of Technology, 10/2023.
4. “Systematic Design of Decentralized Algorithms for Consensus Optimization,” Aerospace Engineering and Engineering Mechanics, University of Texas at Austin, 08/2019.
5. “Systematic Design of Decentralized Algorithms for Consensus Optimization,” Mechanical, Materials, and Aerospace Engineering, Illinois Institute of Technology, 05/2019.
6. “Data-Driven Control and Optimization for Urban Infrastructures,” Electrical and Computer Engineering, University of Connecticut, 04/2017.
7. “Data-Driven Control and Optimization for Urban Infrastructures,” Industrial and Systems Engineering, University of Florida, 04/2017.
8. “Data-Driven Control and Optimization for Urban Infrastructures,” Aerospace Engineering, Iowa State University, 03/2017.
9. “Data-Driven Control and Optimization for Urban Infrastructures,” Electrical & Computer Engineering, University of Rochester, 03/2017.
10. “Data-Driven Control and Optimization for Urban Infrastructures,” Electrical & Computer Engineering, University of Illinois Chicago, 02/2017.

11. "Data-Driven Control and Optimization for Urban Infrastructures," Mechanical Engineering, University of Kentucky, 02/2017.
12. "Distributional Uncertainty: From Quantification to Decision Making," Applied Mathematics & Statistics, UC Santa Cruz, 01/2017.
13. "Enabling Data-Rich Autonomous Urban Infrastructures," Electrical & Computer Engineering, Temple University, 11/2016.
14. "A Theory of Privacy for Cyber-Physical Systems," Electrical & Computer Engineering, Worcester Polytechnic Institute, 10/2016.
15. "Data-Driven and Privacy-Aware Optimization for Smart Cities," Electrical & Systems Engineering, Washington University in St. Louis, 03/2016.
16. "Data-Driven and Privacy-Aware Optimization for Smart Cities," Systems Engineering, Boston University, 02/2016.
17. "A Theory of Privacy for Cyber-Physical Systems," Rigorous Systems Research Group, Caltech, 10/2015.
18. "A Theory of Privacy for Cyber-Physical Systems," Center for Control, Dynamical Systems, and Computation (CCDC), UC Santa Barbara, 10/2015.
19. "A Theory of Privacy for Cyber-Physical Systems," DREAM Seminar, UC Berkeley, 10/2015.
20. "A Theory of Privacy for Cyber-Physical Systems," Coordinated Science Laboratory, UIUC, 10/2015.
21. "A Theory of Privacy for Cyber-Physical Systems," Electrical & Computer Engineering, Purdue University, 10/2015.
22. "A Theory of Privacy for Cyber-Physical Systems," Electrical & Computer Engineering, University of Notre Dame, 10/2015.
23. "A Theory of Privacy for Cyber-Physical Systems," Michigan Power and Energy Lab, University of Michigan, 10/2015.
24. "Convex Optimal Uncertainty Quantification: Algorithms and A Case Study in Energy Storage Placement for Power Grids," MIT, 10/2012.
25. "Convex Optimal Uncertainty Quantification: Algorithms and A Case Study in Energy Storage Placement for Power Grids," PRECISE Center, University of Pennsylvania, 10/2012.