DEPARTMENT: Civil and Environmental Engineering

BIOGRAPHICAL INFORMATION

A. Identifying Data

Name:	Ram Rajagopal
Current Rank:	Assistant Professor
Proposed rank:	Associate Professor (with conferral of tenure)

B. Academic History

Colleges and Universities

2009	UNIVERSITY OF CALIFORNIA, BERKELEY Ph.D., Electrical Engineering and Computer Sciences M.A., Statistics
2002	UNIVERSITY OF TEXAS, AUSTIN M.S.E.E., Telecommunications and Information Systems
1999	FEDERAL UNIVERSITY OF RIO DE JANEIRO, BRAZIL M.Sc., Electrical Engineering, Signal Processing B.S. Electrical Engineering (with Honors)

C. Employment Record

Academic Employment

1/1/2018 – 12/31/2018	STANFORD UNIVERSITY Appointment as Associate Professor of Civil and Environmental Engineering**;** Department of Electrical Engineering (by Courtesy)
1/1/2015 – 12/31/2017	STANFORD UNIVERSITY Reappointment as Assistant Professor of Civil and Environmental Engineering**;** Department of Electrical Engineering (by Courtesy)
9/1/2014 – 12/31/2014	STANFORD UNIVERSITY Fellow, Precourt Institute for Energy

1/1/2011 – 12/31/2014	STANFORD UNIVERSITY Assistant Professor of Civil and Environmental Engineering**;** Department of Electrical Engineering (by Courtesy)
1/1/2010 – 1/1/2011	UNIVERSITY OF CALIFORNIA, BERKELEY Post-doctoral Scholar, Department of Electrical Engineering and Computer Sciences
5/21/2004 **–** 8/8/2005	IBM RESEARCH (TJ WATSON), HAWTHORNE, NY Visiting Research Associate

Nonacademic Employment

8/1/2009 – 12/1/2014	VERIVOLT, LLC. Co-Founder
8/1/2002 – 12/25/2009	SENSYS NETWORKS, INC.; 360 FRESH, INC.; ORIGIN, LLC; PETROBRAS, S. A., BERKELEY, CA Industrial Research for four companies
12/1/1999 – 8/1/2002	NATIONAL INSTRUMENTS CORP., AUSTIN, TX DSP/Vision Software Engineer
12/17/1998 – 12/1/1999	NATIONAL INSTRUMENTS CORP., AUSTIN, TX Applications Engineer
6/1/1997 – 12/1/1998	PACTUAL ASSET MANAGEMENT, UBS PACTUAL, BRAZIL Analyst (Trainee then Employee)
6/1/1996 – 12/12/1996	PETROBRAS, BRAZIL Software Consultant

D. Professional Affiliations

2015 - Present	Associate Editor, IEEE Transactions on Smart Grid
2013	Guest Editor for Journal of Selected Areas in Communications (JSAC) Special Issue on Smart Grids
2013	Guest Editor for IEEE Sensors Journal – Special Issue on Sensing Technologies and Urban Infrastructure
2013	Track Chair for IEEE SmartGridComm, 2013
2011 – Present	Reviewer for IEEE Transactions in Power Systems
2011 – Present	Reviewer for IEEE Transactions in Smart Grid

2007 – Present	Reviewer for IEEE Transactions on Automatic Control
2008 – Present	Reviewer for Transportation Research Part C
2009 – Present	Reviewer for Journal of Computing in Civil Engineering
2007 – Present	Reviewer for IEEE Transactions in Intelligent Transportation Systems
2007 – Present	Reviewer for IEEE Transactions in Signal Processing
2007 – 2010	Reviewer for IEEE Transactions in Information Theory
2008 – 2009	Reviewer for Journal of Infrastructure Systems
2009 – 2010	Reviewer for ACM Transactions in Networking

Professional Memberships

2009 – Present	American Society for Civil Engineering (ASCE)
2007 – Present	Association of Computing Machines (ACM)
1998 – Present	Institute of Electrical and Electronics Engineers (IEEE)

E. University and Departmental Service

2017- Present	Center Fellow, Precourt Institute for Energy
2017 – Present	CEE Vision Committee
2015 – Present	Stanford University pre-major faculty advisor
2011 – Present	Faculty Affiliate, Emmet Interdisciplinary Program in Environment and Resources
2016 – Present	Director and Founding Researcher, Stanford University Bits & Watts Lab
2015 –Present	Electrical Engineering Faculty Search Committee
2015 – 2016	Management Science and Engineering Faculty Search Committee
2014 – 2015	Electrical Engineering Faculty Search Committee
2012 – 2013	Electrical Engineering Faculty Search Committee

F. Awards and Honors

2018	Thomas H. and Polly W. Bredt Faculty Development Scholar
2016	NSF CAREER Award

Presentations

"Open and Scalable Distributed Energy Resource Networks," ARPA-e NODES Program Review Meeting, San Diego, CA March 26, 2018
"Data Analysis Mindset," MediaX Global Innovation Leadership Workshop, Brasilia, Brazil, Mar 21, 2018

"Deep Dive into Bits & Watts Research" and Tour of Bits & Watts Lab, Bits & Watts Advisory Council Meeting, Stanford, CA, November 7, 2017

"Data-Driven Management of Urban Energy Networks: Sensing, Learning and Optimization", US NAS AAF, Arab-American Frontiers Symposium, Smart Cities Session, Nov. 4 2017

"Research activities in the Sustainable Systems Lab and Bits & Watts Initiative", RTE (The French Electricity Transmission Network Corporation, Réseau de Transport d'Électricité) in Paris, France, October 18, 2017.

"Bringing Renewables to Energy Markets", Southern China Power Grid, Guangzhou China, August 10, 2017

"Data-Driven Learning in Power Distribution Networks", Chinese University of Hong Kong, Department of Information Engineering, August 9, 2017

"Smart & Connected Cities are the Future" Hacks/Hackers International Network Meeting, Rio de Janeiro, Brazil, July, 17, 2017

"Data-Driven Modeling of Electric Customer Demand" Energy Modeling Forum Affiliates & Sponsors Meeting, Bechtel Conference Center, Stanford University, CA, May 9th, 2017

"Data-Driven Models in Power Systems", Georgia Tech University Center for Distributed Energy, May 5, 2017

"Coordinating Energy Resources", MIT Smart Urban Infrastructures Workshop, May 12, 2017

"Data Driven Learning in Power Distribution Networks", Texas A&M University, Smart Grid Seminar Series, April 17, 2017

"Data-Driven Models in Power Systems", MIT Institute for Data, Systems, and Society, LIDS seminar series, April 13, 2017

"Data-Driven Learning in Power Distribution Networks", UCLA, Mechanical and Aerospace Engineering, MAE Seminar Series, March 15, 2017

"What is the Power of Groups", Arizona State University, Network Science Seminar Series, November 21, 2014

"Visualization and Insight System for Demand Side Operations and Management (VISDOM)" Lawrence Berkeley Labs, Energy Technologies Seminar Series, September 16, 2014

[Keynote] "Tailoring Demand to Match Supply with Data: How Flexible is Residential Power Consumption?", 1st IEEE Global Conference on Signal and Information Processing, Austin, TX, December 5, 2013

"Demand Management in Smart Grids: Architecture, Data Analytics and Control" USC, Department of Civil & Environmental Engineering, Sept 20, 2013

"The Smarts in Smart Grid: Sensing, Data Analytics and Controls", Carnegie Mellon University, Civil & Environmental Engineering Department, March 22, 2013

G. Bibliographical Information

There are three practices in naming authors in publications: (a) students are named first and faculty are named last, (b) authors are sorted in alphabetic order in some publications, and (c) Dr. Rajagopal's thesis publications done jointly with a company, the University members were listed last due to IP arrangements.
+ Available online for early access, not yet printed.

Refereed Publications

1. Lehra, Jonas & Vrettos, Evangelos & Rajagopal, Ram & Jain, Rishee & Everts, Martin. (2017). Financial Viability of Residential Photovoltaic and Battery Systems in Californias. Journal of Management and Sustainability. 7. 16. 10.5539/jms.v7n4p16.

2. Yang Weng, Jiafan Yu, Ram Rajagopal, "Performance Guaranteed State Estimation for Renewable Penetration with Improved Meters", The Journal of Engineering 01/2018. Submitted 2017, The Journal of Engineering. . 10.1049/joe.2017.0396.

3. Kwac, Jungsuk & In Kim, Jung & Rajagopal, Ram. (Nov 2017). Efficient customer selection process for various DR objectives. IEEE Transactions on Smart Grid. PP. 1-1. 10.1109/TSG.2017.2768520.

4. Huang, Chong & Kairouz, Peter & Chen, Xiao & Sankar, Lalitha & Rajagopal, Ram. (2017). Context-Aware Generative Adversarial Privacy. Entropy. 19. . 10.3390/e19120656.

5. Patel, Siddharth & Rajagopal, Ram. (2017). The Value of Distributed Energy Resources for Heterogeneous Residential Consumers.

6. Avo Sevlian, Raffi & Yu, Jiafan & Liao, Yizheng & Chen, Xiao & Weng, Yang & Kara, Emre & Tabone, Michelangelo & Badri, Srini & Tan, Chin-Woo & Chassin, David & Kiliccote, Sila & Rajagopal, Ram. (2017). VADER: Visualization and Analytics for Distributed Energy Resources. .

7. Anderson, Kyle & Rajagopal, Ram & El Gamal, Abbas. (2017). Coordination of Distributed Energy Storage Under Spatial and Temporal Data Asymmetry. IEEE Transactions on Smart Grid. PP. 1-1. 10.1109/TSG.2017.2740430.

8. Chen, Huimiao & Hu, Zechun & Luo, Haocheng & Qin, Junjie & Rajagopal, Ram & Zhang, Hongcai. (2017). Design and Planning of a Multiple-charger Multiple-port Charging System for PEV Charging Station. IEEE Transactions on Smart Grid. PP. 1-1. 10.1109/TSG.2017.2735636.

9. Balafas, Konstantinos & Kiremidjian, Anne & Rajagopal, Ram. (2017). The wavelet transform as a Gaussian process for damage detection. Structural Control and Health Monitoring. 25. . 10.1002/stc.2087.

10. Avo Sevlian, Raffi & Zhao, Yue & Rajagopal, Ram & Goldsmith, Andrea & Poor, H. Vincent. (2017). Outage Detection Using Load and Line Flow Measurements in Power Distribution Systems. IEEE Transactions on Power Systems. PP. 1-1. 10.1109/TPWRS.2017.2727979

11. Jain, Rishee & Qin, Junjie & Rajagopal, Ram. (2017). Data-driven planning of distributed energy resources amidst socio-technical complexities. Nature Energy. 6. 17112. 10.1038/nenergy.2017.112.

12. Wang, Jianxiao & Zhong, Haiwang & Tang, Wenyuan & Rajagopal, Ram & Xia, Qing & Kang, Chongqing & Wang, Yi. (2017). Optimal Bidding Strategy for Microgrids in Joint Energy and Ancillary Service Markets Considering Flexible Ramping Products. Applied Energy. 205. . 10.1016/j.apenergy.2017.07.047.

13. Yu, Jiafan & Weng, Yang & Rajagopal, Ram. (2017). PaToPa: A Data-Driven Parameter and Topology Joint Estimation Framework in Distribution Grids. IEEE Transactions on Power Systems. PP. . 10.1109/TPWRS.2017.2778194.

14. Bajwa, Ravneet & Coleri, Erdem & Rajagopal, Ram & Varaiya, Pravin & Flores, Christopher. (2017). Development of a Cost Effective Wireless Vibration Weigh-In-Motion System to Estimate Axle Weights of Trucks. Computer-Aided Civil and Infrastructure Engineering. . 10.1111/mice.12269.

15. Li, Pan & Zhang, Baosen & Weng, Yang & Rajagopal, Ram. (2017). A Sparse Linear Model and Significance Test for Individual Consumption Prediction. IEEE Transactions on Power Systems. PP. 1-1. 10.1109/TPWRS.2017.2679110.

16. **Y. Yu,** G. Liu, W. Zhu, F. Wang, B. Shu, K. Zhang, N. Astier, R. Rajagopal, "Good Consumer or Bad Consumer: Economic Information Revealed from Demand Profiles," in *IEEE Transactions on Smart Grid*, vol.PP, no. 99, pp.1-1, 2017 http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7839196

17. P. Li, B. Zhang, Y. Weng, R. Rajagopal, "Autoregressive Model for Individual Consumption Data - LASSO Selection and Significance Test," *IEEE Transactions on Power Systems*, vol.PP, no. 99, pp.1-1 + 2016 http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7741126

18. **R. Sevlian**, R. Rajagopal, "Actively Calibrated Line Mountable Capacitive Voltage Transducer For Power Systems Applications," *IEEE Transactions on Smart Grid*, vol.PP, no. 99, pp. 1-1, Dec. 2016

19. Y. Weng, **Y. Liao**, R. Rajagopal, "Distributed Energy Resources Topology Identification via Graphical Modeling," *IEEE Transactions on Power Systems*, vol.PP, no. 99, pp. 1-1, Nov. 2016

20. I. Yang, S. A. Burden, R. Rajagopal, S. S. Sastry and C. J. Tomlin, "Approximation Algorithms for Optimization of Combinatorial Dynamical Systems," *IEEE Transactions on Automatic Control*, vol. 61, no. 9, pp. 2644-2649, Sept. 2016

21. **J. Kwac**, R. Rajagopal, "Data-Driven Targeting of Customers for Demand Response," *IEEE Transactions on Smart Grid*, vol. 7, no. 5, pp. 2199-2207, Sept. 2016

22. **J. Kwac**, J. Flora, R. Rajagopal, "Lifestyle segmentation based on energy consumption data," *IEEE Transactions on Smart Grid* , vol.PP, no. 99, pp.1-1, Sept. 2016

23. **J. Qin**, Y. Chow, J. Yang, R. Rajagopal, "Online Modified Greedy Algorithm for Storage Control Under Uncertainty," in *IEEE Transactions on Power Systems*, vol. 31, no. 3, pp. 1729-1743, May 2016

24. **A. Albert,** R. Rajagopal, "Finding the right consumers for thermal demand-response: an experimental evaluation," *IEEE Transactions on Smart Grid*, vol.PP, no. 99, pp. 1-1, Apr. 2016

25. **G. O'Brien**, R. Rajagopal, "Scheduling Non-Preemptive Deferrable Loads," *IEEE Transactions on Power Systems*, vol. 31, no. 2, pp. 835-845, Mar. 2016

26. **J. Qin**, Y. Chow, J. Yang, R. Rajagopal, "Distributed Online Modified Greedy Algorithm for Networked Storage Operation Under Uncertainty," *IEEE Transactions on Smart Grid*, vol. 7, no. 2, pp. 1106-1118, Mar. 2016

27. **X. Chen**, S. Qian, R. Rajagopal, T. Stiers, C. Flores, R. Kavaler, F. Williams, "A Parking Sensing and Information System: Sensors, Deployment, and Evaluation," *Transportation Research Record*, vol. 2559, pp. 81-89, 2016

28. **G. O'Brien**, A. El Gamal and R. Rajagopal, "Shapley Value Estimation for Compensation of Participants in Demand Response Programs," *IEEE Transactions on Smart Grid*, vol. 6, no. 6, pp. 2837-2844, Nov. 2015

29. M. Moslehi, R. Rajagopal, F. P.J. de Barros, "Optimal allocation of computational resources in hydrogeological models under uncertainty," *Advances in Water Resources*, vol. 83, pp. 299-309, September 2015

30. **A. Kavousian**, R. Rajagopal, M. Fischer, "Ranking appliance energy efficiency in households: Utilizing smart meter data and energy efficiency frontiers to estimate and identify the determinants of appliance energy efficiency in residential buildings," *Energy and Buildings*, vol. 99, pp. 220-230, Jul. 2015

31. Y. Zhao, **J. Qin**, R. Rajagopal, A. Goldsmith and H. V. Poor, "Wind Aggregation Via Risky Power Markets," *IEEE Transactions on Power Systems*, vol. 30, no. 3,

pp. 1571-1581, May 2015

32. B. Zhang, R. Johari and R. Rajagopal, "Competition and Coalition Formation of Renewable Power Producers," *IEEE Transactions on Power Systems*, vol. 30, no. 3, pp. 1624-1632, May 2015

33. **A. Albert** and R. Rajagopal, "Thermal Profiling of Residential Energy Use," *IEEE Transactions on Power Systems*, vol. 30, no. 2, pp. 602-611, Mar. 2015

34. M. Mollineaux and R. Rajagopal, "Structural health monitoring of progressive damage," *Earthquake Engng Struct. Dyn*., vol. 44, pp. 583-600, 2015

35. A. Tamarazian, **Z. Qian**, Ram Rajagopal, "Where is my parking spot? On-line and off-line prediction of time-varying parking occupancy," *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2489, pp. 77-85, 2015

36. **Y. Yu** and R. Rajagopal, "The Impacts of Electricity Dispatch Protocols on the Emission Reductions Due to Wind Power and Carbon Tax," *Environmental Science and Technology*, vol. 49, no. 4, pp. 2568-2576, 2015

37. **Y. Liao,** M. Mollineaux, R. Hsu, R. Bartlett, A. Singla, A. Raja, R. Bajwa**,** R. Rajagopal**,** "SnowFort: An Open Source Wireless Sensor Network for Data Analytics in Infrastructure and Environmental Monitoring," *IEEE Sensors Journal*, vol. 14, no. 12, pp. 4253-4263, Dec. 2014

38. **A. Albert** and R. Rajagopal, "Cost-of-Service Segmentation of Energy Consumers," *IEEE Transactions on Power Systems*, vol. 29, no. 6, pp. 2795-2803, Nov. 2014

39. B. Zhang, R. Rajagopal and D. Tse, "Network Risk Limiting Dispatch: Optimal Control and Price of Uncertainty," *IEEE Transactions on Automatic Control*, vol. 59, no. 9, pp. 2442-2456, Sept. 2014

40. **Z. Qian** and R. Rajagopal, "Optimal dynamic parking pricing for morning commute considering expected cruising time," *Transportation Research Part C: Emerging Technologies*, vol. 48, pp. 468-490, Nov. 2014

41. **Z. Qian** and R. Rajagopal, "Optimal occupancy-driven parking pricing under demand uncertainties and traveler heterogeneity: A stochastic control approach," *Transportation Research Part B: Methodological*, vol. 67, pp. 144-165, Sept. 2014

42. S. Coleri Ergen, H. S. Tetikol, M. Kontik, **R. Sevlian**, R. Rajagopal and P. Varaiya, "RSSI-Fingerprinting-Based Mobile Phone Localization With Route Constraints," *IEEE Transactions on Vehicular Technology*, vol. 63, no. 1, pp. 423-428, Jan. 2014

43. **J. Kwac**, J. Flora and R. Rajagopal, "Household energy consumption segmentation using hourly data," *IEEE Transactions on Smart Grid*, vol. 5, no. 1, pp. 420-430, 2014

44. P. Leube, F. P.J. de Barros, W. Nowak, R. Rajagopal, "Towards optimal allocation of computer resources: Trade-offs between uncertainty quantification, discretization and model reduction," *Environmental Modelling & Software*, vol. 50, pp. 97-107, Dec. 2013

45. **A. Albert** and R. Rajagopal, "Smart Meter Driven Segmentation: What Your Consumption Says About You," *IEEE Transactions on Power Systems*, vol. 28, no. 4, pp. 4019-4030, Nov. 2013

46. T. Kim, R. Rajagopal, M. Fischer, C. Kam, "A knowledge-based framework for automated space-use analysis," *Automation in Construction*, vol. 32, pp. 165-176, Jul. 2013

47. **R. Sevlian** and R. Rajagopal, "Detection and statistics of wind power ramps," *IEEE Transactions on Power Systems*, vol. 28, no. 4, pp. 3610-3620, Jul. 2013

48. **Z. Qian** and R. Rajagopal, "Optimal Parking Pricing in General Networks with Provision of Occupancy Information," *Procedia - Social and Behavioral Sciences*, vol. 80, pp. 779-805, Jun. 2013

49. R. Rajagopal, E. Bitar, F. Wu, and P. Varaiya, "Risk-limiting dispatch for integrating renewable power," *International Journal of Electrical Power & Energy Systems*, vol. 44, no. 1, pp. 615-628, 2013

50. H.Y. Noh, R. Rajagopal, and A.S. Kiremidjian, "Sequential structural damage diagnosis algorithm using a change point detection method," *Journal of Sound and Vibration*, vol. 332, no. 24, pp. 6419-6433, 2013

51. **A. Kavousian** and R. Rajagopal, M. Fischer, "Determinants of residential electricity consumption: Using smart meter data to examine the effect of climate, building characteristics, appliance stock, and occupants' behavior," *Energy*, vol. 55, no. 15, pp. 184-194, 2013

52. **A. Kavousian,** and R. Rajagopal, "Data-Driven Benchmarking of Building Energy Efficiency Utilizing Statistical Frontier Models," *Journal of Computing in Civil Engineering*, vol. 28, no.1, pp. 79-88, 2013

53. E.Y. Bitar, R. Rajagopal, P. Khargonekar, and K. Poolla, "Bringing wind energy to market," *IEEE Transactions on Power Systems*, vol. 27, no. 3, pp. 1225-1235, 2012

54. A. Krause, R. Rajagopal, A. Gupta, and C. Guestrin, "Simultaneous optimization of sensor placements and balanced schedules," *IEEE Transactions on Automatic*

Control, vol. 99, pp. 2390-2405, 2011

55. R. Rajagopal, and M.J. Wainwright, "Network-based consensus averaging with general noisy channels," *IEEE Transactions on Signal Processing*, vol. 59, no. 1, pp. 373-385, 2011

56. K. Kwong, R. Kavaler, R. Rajagopal, and P. Varaiya, "Real-time measurement of link vehicle count and travel time in a road network," *IEEE Transactions on Intelligent Transportation Systems*, vol. 11, no. 4, pp. 814-825, 2010 See (c) above.

57. S. Bhamidi, R. Rajagopal, and S. Roch, "Network delay inference from additive metrics," *Random Structures & Algorithms*, 37(2): 176-203, 2010 (Authors in alphabetic order)

58. K. Kwong, R. Kavaler, R. Rajagopal, and P. Varaiya, "Arterial travel time estimation based on vehicle reidentification using wireless magnetic sensors," *Transportation Research Part C: Emerging Technologies*, vol. 17, no. 6, pp. 586-606, 2009 (See (c) above)

59. R. Rajagopal, S. Ramamoorthy, L. Wenzel, and H.A. Andrade, "A Rapid Prototyping Tool for Embedded, Real-Time Motion Control Algorithms," *EURASIP Journal on Embedded Systems*, Article ID 162747 (14 total pages), vol. 2009, doi:10.1155/2008/162747, 2008

60. S. Ramamoorthy, R. Rajagopal, and L. Wenzel, "Low-discrepancy curves: algorithms and applications," *Robotica* (Special Issue on Geometry in Robotics), vol. 26, pp. 503-512, 2008

61. C. Kaskiris, R. Jain, R. Rajagopal, and P. Varaiya, "Combinatorial Auction Bandwidth Trading; An Experimental Study, Experiments in Economic Sciences: New Approaches to Solving Real-world Problems," *Lecture Notes in Economics and Mathematical Systems*, vol. 590, pp. 181-186, 2007

62. L. Wenzel, R. Rajagopal, and D. Nair, "Induced Well-Distributed Sets in Riemannian Spaces," *ACM Transactions on Mathematical Software*, vol. 29, no. 1, pp. 82-94, 2003

63. A.M. Duarte, Jr. and R. Rajagopal., "Optimal Scenario Based Currency Overlay," *The Journal of Portfolio Management*, vol. 24, no. 4, pp. 51-59, 1999

Refereed Conference/Symposia Proceedings

1. HUANG, SHIEH-KUNG & Liao, Yizheng & Chang, Chia-Ming & Loh, Chin-Hsiung & Kiremidjian, Anne & Rajagopal, Ram. (2017). Use of Time-frequency Damage Sensitive Features for Structural Damage Diagnosis. . 10.12783/shm2017/13898.
2. Liao, Yizheng & Kiremidjian, Anne & Rajagopal, Ram & Loh, Chin-Hsiung. (2017). Experimental Validation of an Improved Dynamic Displacement Estimation Method using Accelerometer and Gyroscope. . 10.12783/shm2017/14171.
3. Yu, Jiafan & Weng, Yang & Rajagopal, Ram. (2017). Robust mapping rule estimation for power flow analysis in distribution grids. 1-6. 10.1109/NAPS.2017.8107397.
4. Chen, Huimiao & Yu, Yang & Hu, Zechun & Luo, Haocheng & Tan, Chin-Woo & Rajagopal, Ram. (2017). Energy Storage Sharing Strategy in Distribution

Networks Using Bi-level Optimization Approach. . 10.1109/PESGM.2017.8274595.
5. Goldin, Aaron & Rajagopal, Ram & Rivetta, Claudio & M. Rivas Davila, Juan. (2017). The “Smart Dim Fuse”: A new approach to load control as a distributed energy resource. 1-7. 10.1109/COMPEL.2017.8013364.
6. Sevlian, Raffi & Rajagopal, Ram. (2017). Actively calibrated line mountable capacitive voltage transducer for power systems applications. 1-1. 10.1109/PESGM.2017.8274274.
7. Yu, Jiafan & Weng, Yang & Rajagopal, Ram. (2017). Data-driven joint topology and line parameter estimation for renewable integration. 1-5. 10.1109/PESGM.2017.8274182.
8. Yu, Jiafan & Qin, Junjie & Rajagopal, Ram. (2017). On certainty equivalence of demand charge reduction using storage. 3430-3437. 10.23919/ACC.2017.7963477.
9.
10. **Y. Liao**, Y. Weng, C. W. Tan, R. Rajagopal, "Urban distribution grid line outage identification," *2016 International Conference on Probabilistic Methods Applied to Power Systems (PMAPS)*, Beijing, 2016, pp. 1-8. (Student Best Paper Award)

11. **Y. Liao**, A.S. Kiremidjian, R. Rajagopal, C.H. Loh, “Sequential Damage Detection and Localization with Unknown Post-Damage Distribution,” *Engineering Mechanics Institute Conference 2016 (EMI 2016)* at Nashville, TN, May 2016. (Student Best Paper Award)

12. **S. Patel**, S. Borgeson, R. Rajagopal, CA Spurlock, L. Jin, A. Todd, “Time Will Tell: Using Smart Meter Time Series Data to Derive Household Features and Explain Heterogeneity in Pricing Programs,” *Proceedings of the ACEEE Summer Study on Energy Efficiency in Buildings*, 2016, pp. 12-1 - 12-11

13. W. Tang, R. Rajagopal, K. Poolla, P. Varaiya, "Model and data analysis of two-settlement electricity market with virtual bidding," *2016 IEEE 55th Conference on Decision and Control (CDC)*, Las Vegas, NV, 2016, pp. 6645-6650

14. C. Wu, W. Tang, K. Poolla, R. Rajagopal, "Predictability, constancy and contingency in electric load profiles," *2016 IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Sydney, NSW, 2016, pp. 662-667

15. **Y. Yu**, K. R. Moy, W. E. Chapman, P. L. O'Neill, R. Rajagopal, "Assessing climate change vulnerability of microgrid systems," *2016 IEEE Power and Energy Society General Meeting (PESGM)*, Boston, MA, 2016, pp. 1-5

16. Radovanović *et al*., "Powernet for distributed energy resource networks," *2016 IEEE Power and Energy Society General Meeting (PESGM)*, Boston, MA, 2016, pp. 1-5

17. P. Li, B. Zhang, Y. Weng, R. Rajagopal, "Autoregressive model for individual consumption data - Sparsity recovery and significance test," *2016 IEEE Power and Energy Society General Meeting (PESGM)*, Boston, MA, 2016, pp. 1-5

18. **J. Qin**, I. Yang, R. Rajagopal, "Submodularity of energy storage placement in power networks," *2016 IEEE 55th Conference on Decision and Control (CDC)*, Las Vegas, NV, 2016, pp. 686-693. (Student Best Paper Award Finalist)

19. **Y. Liao**, Y. Weng, R. Rajagopal, "Urban distribution grid topology reconstruction via LASSO," *2016 IEEE Power and Energy Society General Meeting (PESGM)*, Boston, MA, 2016, pp. 1-5

20. J. Andre, A.S. Kiremidjian, **Y. Liao**, C. Georgakis, R. Rajagopal, "Structural health monitoring approach for detecting ice accretion on bridge cable using the Haar Wavelet Transform," *SPIE Smart Structures/NDE conference 2016* at Las Vegas, NV, March 2016

21. **Y. Liao**, A.S. Kiremidjian, R. Rajagopal, C.H. Loh, "Angular velocity-based Structural Damage Detection," *SPIE Smart Structures/NDE Conference 2016* at Las Vegas, NV, March 2016

22. **A. Albert** and R. Rajagopal, "Strategic scheduling of residential energy consumers," *2015 54th IEEE Conference on Decision and Control (CDC)*, Osaka, 2015, pp. 3260-3265

23. **J. Yu**, Y. Weng, C. W. Tan, R. Rajagopal, "Probabilistic estimation of the potentials of intervention-based demand side energy management," *2015 IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Miami, FL, 2015, pp. 865-870

24. **A. Albert**, R. Rajagopal, "Thermal profiling of residential energy use," *2015 IEEE Power & Energy Society General Meeting*, Denver, CO, 2015, pp. 1-1

25. A. Gupta, R. Jain, R. Rajagopal, "Scheduling, pricing, and efficiency of non-preemptive flexible loads under direct load control," *2015 53rd Annual Allerton Conference on Communication, Control, and Computing (Allerton)*, Monticello, IL, 2015, pp. 1008-1015

26. D. Kalathil, R. Rajagopal, "Online learning for demand response," *2015 53rd Annual Allerton Conference on Communication, Control, and Computing (Allerton)*, Monticello, IL, 2015, pp. 218-222

27. **A. Albert**, R. Rajagopal, "Cost-of-service segmentation of energy consumers," *2015 IEEE Power & Energy Society General Meeting*, Denver, CO, 2015, pp. 1-1

28. **R. A. Sevlian**, J. Lizarazo, R. Rajagopal, "An Actively Calibrated Capacitively Coupled Electrostatic Device for high voltage measurement," *2015 IEEE Power & Energy Society General Meeting*, Denver, CO, 2015, pp. 1-5

29. **G. Cezar**, R. Rajagopal, B. Zhang, "Stability of interconnected DC converters," *2015 54th IEEE Conference on Decision and Control (CDC)*, Osaka, 2015, pp. 9-14

30. W. Tang, **J. Qin**, R. Jain, R. Rajagopal, "Pricing sequential forward power contracts," *2015 IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Miami, FL, 2015, pp. 563-568

31. Y. Weng, R. Rajagopal, "Probabilistic baseline estimation via Gaussian process," *2015 IEEE Power & Energy Society General Meeting*, Denver, CO, 2015, pp. 1-5

32. Y. Zhao, **J. Qin**, R. Rajagopal, A. Goldsmith, H. V. Poor, "Wind aggregation via risky power markets," *2015 IEEE Power & Energy Society General Meeting*, Denver, CO, 2015, pp. 1-1

33. **Y. Liao**, Y. Weng, M. Wu, R. Rajagopal, "Distribution grid topology reconstruction: An information theoretic approach," *2015 North American Power Symposium (NAPS)*, Charlotte, NC, 2015, pp. 1-6

34. **Y. Liao**, K. Balafas, A.S. Kiremidjian, R. Rajagopal, C.H. Loh, “Application of acceleration-based damage detection algorithms to experimental data from multi-story steel structures,” *10th International Workshop on Structural Health Monitoring (IWSHM2015)* at Stanford, CA, Sept. 2015

35. **Y. Liao**, R. Rajagopal, “Message-passing sequential detection of multiple structural damages,” *12th International Conference on Applications of Statistics and Probability in Civil Engineering (ICASP12)* at Vancouver, Canada, July 2015

36. **Y. Liao**, K. Balafas, R. Rajagopal, A.S. Kiremidjian, “Sequential damage detection based on the Continuous Wavelet Transform,” *SPIE Smart Structures/NDE Conference 2015* at San Diego, CA, Mar. 2015

37. W. Tang, R. Jain, R. Rajagopal, "Stochastic dynamic pricing: Utilizing demand response in an adaptive manner," *53rd IEEE Conference on Decision and Control*, Los Angeles, CA, 2014, pp. 6446-6451

38. **J. Qin**, R. Rajagopal, "Price of uncertainty in multistage stochastic power dispatch," *53rd IEEE Conference on Decision and Control*, Los Angeles, CA, 2014, pp. 4065-4070

39. **R. A. Sevlian**, R. Rajagopal, "A model for the effect of aggregation on short term load forecasting," *2014 IEEE PES General Meeting | Conference & Exposition*, National Harbor, MD, 2014, pp. 1-5

40. **S. Patel**, **R. Sevlian**, B. Zhang, R. Rajagopal, "Aggregation for load servicing," *2014 IEEE PES General Meeting | Conference & Exposition*, National Harbor, MD, 2014, pp. 1-5

41. **Y. Yu**, B. Zhang, R. Rajagopal, "Do wind power producers have market power and exercise it?," *2014 IEEE PES General Meeting | Conference & Exposition*, National Harbor, MD, 2014, pp. 1-5

42. R. Bajwa, R. Rajagopal, E. Coleri, P. Varaiya, C. Flores, "In-pavement wireless Weigh-In-Motion," *2013 ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN)*, Philadelphia, PA, 2013, pp. 103-114

43. **A. Albert,** R. Rajagopal, “Building dynamic thermal profiles of energy consumption for individuals and neighborhoods,” *IEEE International Conference on Big Data*, pp. 723-728, IEEE, 2013

35. **J. Kwac,** R. Rajagopal, “Demand response targeting using big data analytics,” *IEEE International Conference on Big Data*, pp. 683-690, IEEE, 2013

36. **J. Kwac,** C.W. Tan, N. Sintov, J. Flora, R. Rajagopal, “Utility customer segmentation based on smart meter data: Empirical study,” *IEEE International Conference on Smart Grid Communications (SmartGridComm)*, pp. 720-725, IEEE, 2013

37. **R. Sevlian,** R. Rajagopal, “Value of aggregation in smart grids,” *IEEE International Conference on Smart Grid Communications (SmartGridComm)*, pp. 714–719, IEEE, 2013

38. Y. Zhao*, **J. Qin***, R. Rajagopal, A. Goldsmith, H.V. Poor, "Risky power forward contracts for wind aggregation," *49th Annual Allerton Conference on Communication, Control, and Computing*, pp. 1-8, Allerton, IL, 2013. (*Equal contributions)

39. Y. Zhao, **R. Sevlian***, R. Rajagopal, A. Goldsmith, H.V. Poor, "Outage detection in power distribution networks with optimally-deployed power flow sensors," *2013 IEEE Power and Energy Society General Meeting (PES)* [PES Best Papers], pp. 1-5, IEEE, 2013 (*Equal contributions.)

40. R. Rajagopal, D. Tse, B. Zhang, "Risk limiting dispatch in congested networks," *Proceedings of the Control and Decision Conference (CDC)*, pp. 283-284. IEEE, 2013 (Authors listed alphabetically.)

41. **J. Qin** and R. Rajagopal, "Dynamic Programming Solution to Distributed Storage Operation and Design," *2013 IEEE Power and Energy Society General Meeting (PES)*, pp. 1-5, 2013

42. **Y. Yu** and R. Rajagopal, "Financial transmission rights perform well in power markets with high penetration of wind energy?," *2013 IEEE Power and Energy Society General Meeting (PES)*, pp. 1-6, IEEE, 2013

43. R. Bajwa, R. Rajagopal, E. Coleri, P. Varaiya, and C. Flores, "In-pavement wireless weigh-in-motion," *Proceedings of the 12th International Conference on Information Processing in Sensor Networks*, pp. 103-114, 2013

44. **M. Mollineaux** and R. Rajagopal, "Sequential detection of progressive damage," *SPIE Smart Structures and Materials+ Nondestructive Evaluation and Health Monitoring*, International Society for Optics and Photonics, pp. 86920U-86920U, 2013

45. **J. Qin**, H. Su, and R. Rajagopal, "Storage in risk limiting dispatch: Control and approximation," *Proceedings of the 32nd American Control Conference (ACC)*, pp. 4202-4208, IEEE, 2013

46. H.Y. Noh and R. Rajagopal, "Data-driven forecasting algorithms for building energy consumption," *SPIE Smart Structures and Materials+ Nondestructive Evaluation and Health Monitoring*, pp. 86920T. International Society for Optics and Photonics, 2013

47. **G. O'Brien** and R. Rajagopal, "A method for automatically scheduling notified deferrable loads," *Proceedings of the 32nd American Control Conference (ACC)*, pp. 5080-5085. IEEE, 2013

48. **G. O'Brien,** A. El Gamal, and R. Rajagopal, "Efficient computation of shapley values for demand response programs," *Proceedings of the 4th ACM e-Energy*, pp. 283-284. ACM, 2013

49. **S. Qian** and R. Rajagopal, "Optimal stochastic control for parking systems: occupancy-driven parking pricing," *Proceedings of the Control and Decision Conference (CDC)*, pp. 7771-7776. IEEE, 2013

50. **Z.S. Qian** and R. Rajagopal, "Optimal parking pricing in general networks with provision of occupancy information," *Procedia-Social and Behavioral Sciences*, vol. 80, pp. 779-805, 2013

51. **J. Qin,** R. Sevlian, D. Varodayan, and R. Rajagopal, "Optimal Electric Energy Storage Operation," *2012 IEEE Power and Energy Society General Meeting (PES)*, pp. 1-6, IEEE, 2012

52. R. Rajagopal, E. Bitar, F. Wu, and P. Varaiya, "Risk limiting dispatch of wind power," *Proceedings of the 31st American Control Conference (ACC)*, 2012, pp. 4417-4422. IEEE, 2012

53. H.Y. Noh, R. Rajagopal, and A.S. Kiremidjian, "Damage diagnosis algorithm using a sequential change point detection method with an unknown distribution for damage," *SPIE Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems*, International Society for Optics and Photonics, pp. 834507, 2012

54. E. Bitar, P. Khargonekar, K. Poolla, R. Rajagopal, P. Varaiya, and F. Wu, "Selling random wind," *2012 45th Hawaii International Conference on System Science (HICSS)* [Best paper runner up], pp. 1931-1937. IEEE, 2012. (Authors listed alphabetically)

55. R. Rajagopal, J. Bialek, C. Dent, R. Entriken, F. Wu, and P. Varaiya. "Risk limiting dispatch: Empirical study," *12th International Conference on Probabilistic Methods Applied to Power Systems (PMAPS)*, pp. 1-6, Istanbul, Turkey, 2012

56. E.Y. Bitar, R. Rajagopal, P. Khargonekar, and K. Poolla, "The role of co-located storage for wind power producers in conventional electricity markets," *Proceedings of the 30th IEEE American Control Conference (ACC)*, pp. 3886-3891, 2011

57. R. Bajwa, R. Rajagopal, P. Varaiya, and R. Kavaler, "In-pavement wireless sensor network for vehicle classification," *10th International Conference on Information Processing in Sensor Networks (IPSN)* [Best paper runner up], pp. 85-96, 2011

58. R.O. Sanchez, C. Flores, R. Horowitz, R. Rajagopal, P. Varaiya, "Vehicle re-identification using wireless magnetic sensors: Algorithm revision, modifications and performance analysis," *IEEE International Conference on Vehicular Electronics and Safety (ICVES)*, pp. 226-231, 2011

59. R.O. Sanchez, C. Flores, R. Horowitz, R. Rajagopal, P. Varaiya, "Arterial travel time estimation based on vehicle re-identification using magnetic sensors: Performance analysis," *14th International IEEE Conference on Intelligent Transportation Systems* (ITSC), pp. 997-1002, 2011

60. A. Krause, R. Rajagopal, A. Gupta, and C. Guestrin, "Simultaneous placement and scheduling of sensors," *8th International Conference on Information Processing in Sensor Networks*, IEEE Computer Society, pp. 181-192, 2009

61. R. Rajagopal, X. Nguyen, S.C. Ergen, and P. Varaiya, "Theory of Simultaneous Fault Detection for Multiple Sensors," *2nd International Workshop on Sequential Methods (IWSM)*, pp. 1-1, France, 2009

62. K. Kwong, R. Kavaler, R. Rajagopal, and P. Varaiya, "Practical Scheme for Arterial travel time estimation based on vehicle re-identification using wireless sensors," *88th Annual Meeting of the Transportation Research Board*, Paper number 09-0494, pp. 1-15, Washington, DC, 2009

63. R. Rajagopal and P.P. Varaiya, "Evaluating the health of California's loop sensor network," *88th Annual Meeting of the Transportation Research Board*, Paper number 09-1728, pp. 1-15, Washington, DC, 2009

64. R. Rajagopal, R. Zhang, H. Mortazavi, A. Varaiya, K. Kowng, and S. Wunder, "Capturing Hybrid Vehicles in HOV Lanes," *50th Annual Forum of the TRF*, pp. 1-1, Portland, 2009

65. J. Sairamesh, R. Rajagopal, R. Nemana, and K. Argenbright, "Early Warning and Risk Estimation methods based on Unstructured Text in Electronic Medical Records to Improve Patient Adherence and Care," *AMIA Annuual Symposium Proceedings 2009*, pp. 553-557, 2009

66. J. Sairamesh, R. Rajagopal, I. Khayal, K. Argenbright, and R. Nemana, "Early Detection Methods for Improving Patient Care: Harnessing insight from raw patient notes," *3rd INFORMS Workshop on Data Mining and Health Informatics (DMHI)*, Washington, DC, 2008

67. R. Rajagopal, X. Nguyen, S.C. Ergen, and P. Varaiya, "Distributed Online Simultaneous Fault Detection for Multiple Sensors," *Proceedings of the 2008 International Conference on Information Processing in Sensor Networks (IPSN 2008)*, pp. 133-144, St Louis, MO, 2008 (18.7% accepted)

68. R. Rajagopal and M.J. Wainwright, "Stochastic Approximation Analysis of distributed algorithms," *Proceedings of the 44th Annual Allerton Conference on Commununication, Control and Computation*, Monticello, IL, 2007

69. S. Ramamoorthy, R. Rajagopal, Q. Ruan, L. Wenzel, I.S. Akella, N. Amato, W. Huang, and B. Mishra, "Low-discrepancy curves and efficient coverage of space," *Algorithmic Foundations of Robotics VII*, Springer-Verlag, 2007

70. R. Rajagopal and M. Wainwright, "Universal Quantile Estimation with Feedback in the Communication-Constrained Setting," *Proceedings of the 2006 IEEE International Symposyum on Information Theory (ISIT)*, pp. 836-840, 2006

71. C. Kaskiris, R. Jain, R, Rajagopal, and P. Varaiya, "Combinatorial Auction Design for Bandwidth Trading: An Experimental Study," *International Conference Experiments in Economic Sciences*, Okayama and Kyoto, Japan, 2004

72. R. Rajagopal and L. Wenzel, "Peak Locations in All-Pass Signals - The Makhoul Conjecture Challenge," *Proceedings of the IEEE International Conference for Acoustics, Speech, and Signal Processing (ICASSP 01)*, Salt Lake City, UT, pp. 3961-3964, 2001

73. R. Rajagopal, D. Nair, and L. Wenzel, "Pattern Matching based on a Generalized Fourier Transform," *Proceedings of the SPIE Advanced Signal Processing Algorithms, Architectures, and Implementations X*, San Diego, CA, pp. 472-480, 2000

74. J.M. Seixas, R. Rajagopal, and L.P. Caloba, "Neural Networks applied to Particle Separation in Scintillating Calorimeters," *IV CBRN Brazilian Congress in Neural Networks*, Sao Paulo, Brazil, 1999

75. R. Rajagopal, J.M. Seixas, and L.P. Caloba,, "Scintillating Tile Calorimeter Time Signal Characterization," *XIX ENFPC Brazilian Congress in Particle Physics and Field Theory*, Cachambu, Brazil, 1998

76. J.M. Seixas, L.P. Caloba, and R. Rajagopal, "C14] Neural Electron/Pion Discriminator with a Projective Fiber Calorimeter," *Proceedings of the CHEP '94 Computers in High Energy Physics*, San Francisco, CA, 1999

77. S.A. Zahorian, B. Hawickhorst, and R. Rajagopal, "Comparison of Three Neural Network Architectures for Automatic Speech Recognition," *Proceedings of the ANNIE '95 Artificial Neural Networks in Eng*, St. Louis, MO, 1995

Book and Book Chapters

1. **J. Kwac**, R. Rajagopal, Chapter 4 - Customer Selection Utilizing Big Data Analytics, In: Venu Govindaraju, Vijay V. Raghavan and C.R. Rao, Editor(s), *Handbook of Statistics*, Elsevier, **2015**, Volume 33, pp. 89-106

Technical Reports

1. A. Krause, R. Rajagopal, A. Gupta, and C. Guestrin, "Simultaneous Placement and Scheduling of Sensors,*" Technical Report CMU-ML-08-114*, 2008

2. R. Rajagopal and P. Varaiya, "Health of California's Loop Detector System," *California Path Research Report UCB-ITS-PRR,* 2007

Patents Issued or to be Issued

1. 7,627,510, Method and apparatus matching incoming to outgoing vehicle signatures to estimate arterial vehicular movement, 04/23/2013

2. 8,396,650, Method and apparatus generating estimates vehicular movement involving multiple input-output roadway nodes, 03/12/2013

3. WO/2011/029,018 Voltage conversion and/or electrical measurements from 400 volts and upwards, 03/10/2011

4. 7,627,510, System and method for conducting combinatorial exchanges, 12/01/2009

5. 7,516,131, Method and Apparatus for Ranking-Based Information Processing, 04/07/2009

6. 7,233,700, System and method for signal matching and characterization, 06/19/2007

7. 7,171,048, Pattern matching system utilizing discrete curve matching with a mapping operator, 01/30/2007

8. 7,158,677, Matching of discrete curves under affine transforms, 01/02/2007

9. 7,139,432, Image pattern matching utilizing discrete curve matching with a mapping operator, 11/21/2006

10. 7,136,505, Generating a curve matching mapping operator by analyzing objects of interest and background information, 11/14/2006

11. 7,133,538, Pattern matching utilizing discrete curve matching with multiple mapping operators, 11/07/2006

12. 7,127,100, System and method for analyzing an image, 10/24/2006

13. 7,120,301, Efficient re-sampling of discrete curves, 10/10/2006

14. 7,034,831, System and method for generating a low discrepancy curve in a region, 04/25/2006

15. 7,013,047, System and method for performing edge detection in an image, 03/14/2006

16. 6,963,667, System and method for signal matching and characterization, 11/08/2005

17. 6,959,104, System and method for scanning a region using a low discrepancy sequence, 10/25/2005

18. 6,950,552, System and method for precise location of a point of interest, 09/27/2005

19. 6,917,710, System and method for scanning a region using a low discrepancy curve, 07/12/2005

20. 6,909,801, System and method for generating a low discrepancy curve on an abstract surface, 06/21/2005

21. 6,882,958, System and method for curve fitting using randomized techniques, 04/19/2005

22. 6,820,032, System and method for scanning a region using conformal mapping, 11/16/2004

23. 6,807,305, System and method for image pattern matching using a unified signal transform, 10/19/2004

24. 6,665,335, System and method for estimating a shift between two signals where one signal is known in advance, 12/16/2003

25. 6,615,158, System and method for analyzing a surface by mapping sample points onto the surface and sampling the surface at the mapped points, 09/02/2003

26. 6,535,640, Signal analysis system and method for determining a closest vector from a vector collection to an input signal, 03/18/2003

Pending Patents

1. 2013 Oriented-Wireless Structural Health and Seismic Monitoring

2. 2013 Data-Driven Targeting of Energy Programs Including Household Energy Consumption Lifestyle Segmentation Using Hourly Data

3. 2013 Data-Driven Targeting of Energy Programs Using Time-Series Data

4. 0020234 Wireless and Wireline Sensor Nodes, Micro-Radar, Networks and Systems (Submitted 2013)

5. 0173171 In-Pavement Wireless Vibration Sensor Nodes, Networks and Systems (Submitted 2012)

List of Students

PhD Students

Current

Sid Patel – Civil and Environmental Engineering
Thesis: “Data-Driven Learning and Planning in Smart Grids”
Anticipated date of graduation: Summer 2018

Jiafan Yu – Electrical Engineering
Thesis: “Visualization and Analytics for Distributed Energy Resources”
Anticipated date of graduation: Summer 2018

Gustavo Cezar – Civil and Environmental Engineering
Thesis: “Wireless Sensor and Actuator Network for Renewable Integration”
Anticipated date of graduation: Winter 2019

Former

Yizheng Liao – Civil and Environmental Engineering
Thesis: “Sequential Methods for Infrastructure Health Monitoring”
Anticipated date of graduation: Autumn 2017

Junjie Qin – Management Science & Engineering; Institute for Computational & Mathematical Engineering
Thesis: “Risk Limited Operations and Planning in Smart Grids”
Anticipated date of graduation: Autumn 2017

Raffi Sevlian – Electrical Engineering
Thesis: “Sensing and strategies for power distribution system situational awareness”
Graduated: Winter 2017

Yang Yu – co-advisor, Civil & Environmental Engineering
Thesis: "Bringing renewables to electricity markets: environmental end economic impacts"
Graduated: 2016

Jungsuk Kwac – Electrical Engineering
Thesis: "Data mining for demand management: segmentation, targeting, and analytics visualization"
Graduated: 2015

Adrian Albert – co-advisor, Electrical Engineering
Thesis: "Problems, models, and algorithms in data-driven energy demand management"
Graduated: 2014

Gearoid O'Brien – co-advisor, Electrical Engineering
Thesis: "Scheduling, revenue sharing, and user behavior for aggregated demand response"
Graduated: 2014

Amir Kavousian – co-advisor, Civil and Environmental Engineering
Thesis: "Stochastic Energy Efficiency Frontier: a Data-Driven Benchmark for Buildings"
Graduated: 2014

Postdoctoral Researchers Supervised

Current

Mohammad Rasouli – Civil & Environmental Engineering
Appointed: 2017

Yuting Ji – Civil & Environmental Engineering
Appointed: 2017

Peter Kairouz – Electrical Engineering
Appointed: 2016

Michelangelo Tabone – Civil & Environmental Engineering
Appointed: 2016

Former

Raffi Sevlian – Civil & Environmental Engineering
Appointed: 2017

Rishee Jain – Civil & Environmental Engineering
Assistant Professor, Stanford
Appointed: 2015

Yang Weng – Civil & Environmental Engineering
Assistant Professor, Arizona State University
Appointed: 2015

Baosen Zhang – Civil & Environmental Engineering
Assistant Professor, Univ. of Washington
Appointed: 2014

Zhen (Sean) Qian – Civil & Environmental Engineering
Assistant Professor, Carnegie Mellon
Appointed: 2013

Hae Young Noh – Civil & Environmental Engineering
Assistant Professor, Carnegie Mellon
Appointed: 2012

Masters Students Supervised (with publications)

Current

Xiao (Mark) Chen
Anticipated date of graduation: 2017

Former

Zhen (Sean) Qian
Date of graduation: 2014
Published 5 papers as co-author

Mark Mollineaux
Date of graduation: 2013
Published 3 papers as co-author