



Ram Rajagopal

Associate Professor of Civil and Environmental Engineering and of Electrical Engineering

 Curriculum Vitae available Online

CONTACT INFORMATION

- **Administrator**

Barbara Jean Gunderson - Administrative Associate for
Professor Ram Rajagopal

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Bio

BIO

Ram Rajagopal is an Associate Professor of Civil and Environmental Engineering at Stanford University, where he directs the Stanford Sustainable Systems Lab (S3L), focused on large-scale monitoring, data analytics and stochastic control for infrastructure networks, in particular, power networks. His current research interests in power systems are in the integration of renewables, smart distribution systems, and demand-side data analytics.

He holds a Ph.D. in Electrical Engineering and Computer Sciences and an M.A. in Statistics, both from the University of California Berkeley, Masters in Electrical and Computer Engineering from University of Texas, Austin and Bachelors in Electrical Engineering from the Federal University of Rio de Janeiro. He is a recipient of the NSF CAREER Award, Powell Foundation Fellowship, Berkeley Regents Fellowship and the Makhoul Conjecture Challenge award. He holds more than 30 patents and several best paper awards from his work and has advised or founded various companies in the fields of sensor networks, power systems, and data analytics.

ACADEMIC APPOINTMENTS

- Associate Professor, Civil and Environmental Engineering
- Associate Professor, Electrical Engineering
- Member, Maternal & Child Health Research Institute (MCHRI)
- Affiliate, Precourt Institute for Energy

ADMINISTRATIVE APPOINTMENTS

- Co-Academic Director, Stanford Global Projects Center, (2018- present)
- Director and Founding Researcher, Stanford University Bits and Watts Lab, (2016- present)

HONORS AND AWARDS

- NSF CAREER Award, NSF (2016)

LINKS

- Ram Rajagopal: <http://web.stanford.edu/~ramr/>
- Powernet Project: <https://powernet.stanford.edu/>

Teaching

COURSES

2023-24

- Engineering Future Electricity Systems: CEE 272R, ENERGY 272R (Spr)
- SmartGrids and Advanced Power Systems Seminar: CEE 272T, EE 292T (Aut, Win, Spr)
- Sustainable Mobility Seminar: CEE 272M (Spr)

2022-23

- Data Analytics for Urban Systems: CEE 322 (Aut)
- Engineering Future Electricity Systems: CEE 272R, ENERGY 272R (Spr)
- SmartGrids and Advanced Power Systems Seminar: CEE 272T, EE 292T (Aut, Win, Spr)

2021-22

- Data Analytics for Urban Systems: CEE 322 (Aut)
- SmartGrids and Advanced Power Systems Seminar: CEE 272T, EE 292T (Aut, Win, Spr)

2020-21

- Artificial Intelligence Applications in the AEC Industry: CEE 329 (Spr)
- Data Analytics for Urban Systems: CEE 322 (Aut)
- Modern Power Systems Engineering: CEE 272R (Spr)
- SmartGrids and Advanced Power Systems Seminar: CEE 272T, EE 292T (Aut, Win, Spr)
- Sustainable Energy Interdisciplinary Graduate Seminar: CEE 372, ENERGY 309, MS&E 495 (Aut, Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Emmanuel Balogun, Lily Buechler, Anthony Degleris, Tulika Majumdar, Obi Nnorom Jr, Carla Pinzon

Postdoctoral Faculty Sponsor

Chad Zanocco

Doctoral Dissertation Advisor (AC)

Lily Buechler, Aaron Goldin, Tianyuan Huang, Justin Luke, Sonia Martin, Josh Neutel, Tao Sun, Oskar Triebe

Master's Program Advisor

Grace Abraham, Jovan Aigbekaen, JINPU CAO, Uli Degirmenci, Aramis Dufour, Samuel Garcia, Hemanth Hariharan, Trinity Manuelito, Tengbo Wang

Doctoral (Program)

Yirong Chen, Mateus De Castro Ribeiro, Tony Liu, Josh Neutel, Fletcher Passow, Rajanie Prabha, Oskar Triebe

Publications

PUBLICATIONS

- **Estimating building energy efficiency from street view imagery, aerial imagery, and land surface temperature data** *APPLIED ENERGY*
Mayer, K., Haas, L., Huang, T., Bernabe-Moreno, J., Rajagopal, R., Fischer, M.
2023; 333
- **Assessing Californians' awareness of their daily electricity use patterns** *NATURE ENERGY*

- Zanocco, C., Sun, T., Stelmach, G., Flora, J., Rajagopal, R., Boudet, H.
2022
- **DeepSolar++: Understanding residential solar adoption trajectories with computer vision and technology diffusion models** *JOULE*
Wang, Z., Arlt, M., Zanocco, C., Majumadaar, A., Rajagopal, R.
2022; 6 (11): 2611-2625
 - **Charging infrastructure access and operation to reduce the grid impacts of deep electric vehicle adoption** *NATURE ENERGY*
Powell, S., Cezar, G., Min, L., Azevedo, I. L., Rajagopal, R.
2022
 - **Do water savings persist? Using survival models to plan for long-term responses to extreme drought** *ENVIRONMENTAL RESEARCH LETTERS*
Bolorinos, J., Rajagopal, R., Ajami, N. K.
2022; 17 (9)
 - **Can Distributed Intermittent Renewable Generation Reduce Future Grid Investments? Evidence from France** *JOURNAL OF THE EUROPEAN ECONOMIC ASSOCIATION*
Astier, N., Rajagopal, R., Wolak, F. A.
2022
 - **Constructing dynamic residential energy lifestyles using Latent Dirichlet Allocation** *APPLIED ENERGY*
Chen, X., Zanocco, C., Flora, J., Rajagopal, R.
2022; 318
 - **Quick Line Outage Identification in Urban Distribution Grids via Smart Meters** *CSEE JOURNAL OF POWER AND ENERGY SYSTEMS*
Liao, Y., Weng, Y., Tan, C., Rajagopal, R.
2022; 8 (4): 1074-1086
 - **Large-scale scenarios of electric vehicle charging with a data-driven model of control** *ENERGY*
Powell, S., Cezar, G., Apostolaki-Iosifidou, E., Rajagopal, R.
2022; 248
 - **<p>3D-PV-Locator: Large-scale detection of rooftop-mounted photovoltaic systems in 3D</p>** *APPLIED ENERGY*
Mayer, K., Rausch, B., Arlt, M., Gust, G., Wang, Z., Neumann, D., Rajagopal, R.
2022; 310
 - **Scalable probabilistic estimates of electric vehicle charging given observed driver behavior** *APPLIED ENERGY*
Powell, S., Cezar, G., Rajagopal, R.
2022; 309
 - **The Grid Under Extremes: Pandemic Impacts on California Electricity Consumption** *IEEE Power and Energy Magazine*
Bergman, D., Sun, T., Buechler, E., Zanocco, C., Rajagopal, R.
2022; 20 (6): 38-46
 - **Software defined grid energy storage** *9th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation*
Martin, S., Mosier, N., Nnorom, O., Ou, Y., Patel, L., Triebe, O., Cezar, G., Levis, P., Rajagopal, R.
2022: 10
 - **Effect of State of Charge Uncertainty on Battery Energy Storage Systems**
Martin, S., Onori, S., Rajagopal, R.
ELSEVIER.2022: 740-745
 - **Global Changes in Electricity Consumption During COVID-19.** *iScience*
Buechler, E., Powell, S., Sun, T., Astier, N., Zanocco, C., Bolorinos, J., Flora, J., Boudet, H., Rajagopal, R.
2021: 103568
 - **A Statistical Methodology to Estimate Soiling Losses on Photovoltaic Solar Plants** *JOURNAL OF SOLAR ENERGY ENGINEERING-TRANSACTIONS OF THE ASME*
Ribeiro, K., Santos, R., Saraiva, E., Rajagopal, R.
2021; 143 (6)

- **The disaster resilience value of shared rooftop solar systems in residential communities** *EARTHQUAKE SPECTRA*
Patel, S., Ceferino, L., Liu, C., Kiremidjian, A., Rajagopal, R.
2021; 37 (4): 2638-2661
- **When the lights go out: Californians' experience with wildfire-related public safety power shutoffs increases intention to adopt solar and storage** *ENERGY RESEARCH & SOCIAL SCIENCE*
Zanocco, C., Flora, J., Rajagopal, R., Boudet, H.
2021; 79
- **Mining the gap in long-term residential water and electricity conservation** *ENVIRONMENTAL RESEARCH LETTERS*
Bolorinos, J., Rajagopal, R., Ajami, N. K.
2021; 16 (2)
- **Time and voltage domain load models for appliance-level grid edge simulation and control** *ELECTRIC POWER SYSTEMS RESEARCH*
Goldin, A., Buechler, E., Rajagopal, R., Rivas-Davila, J.
2021; 190
- **Joint Optimization of Autonomous Electric Vehicle Fleet Operations and Charging Station Siting** *2021 IEEE International Intelligent Transportation Systems Conference (ITSC)*
Luke, J., Salazar, M., Rajagopal, R., Pavone, M.
2021: 3340-3347
- **An OpenAI-OpenDSS framework for reinforcement learning on distribution-level microgrids** *2021 IEEE Power & Energy Society General Meeting (PESGM)*
Moy, K., Tae, C., Wang, Y., Henri, G., Bambos, N., Rajagopal, R.
2021
- **On the Interaction between Autonomous Mobility on Demand Systems and Power Distribution Networks --- An Optimal Power Flow Approach** *IEEE Transactions on Control of Network Systems*
Estandia, A., Schiffer, M., Rossi, F., Luke, J., Kara, E. C., Rajagopal, R., Pavone, M.
2021
- **Data-Driven Load Modeling and Forecasting of Residential Appliances**
Ji, Y., Buechler, E., Rajagopal, R., IEEE
IEEE.2021
- **Energy resource control via privacy preserving data** *ELECTRIC POWER SYSTEMS RESEARCH*
Chen, X., Navidi, T., Rajagopal, R.
2020; 189
- **Improving Probabilistic Load Forecasting Using Quantile Regression NN With Skip Connections** *IEEE TRANSACTIONS ON SMART GRID*
Zhang, W., Quan, H., Gandhi, O., Rajagopal, R., Tan, C., Srinivasan, D.
2020; 11 (6): 5442–50
- **Controlled workplace charging of electric vehicles: The impact of rate schedules on transformer aging** *APPLIED ENERGY*
Powell, S., Kara, E., Sevlian, R., Cezar, G., Kiliccote, S., Rajagopal, R.
2020; 276
- **Exploring household energy rules and activities during peak demand to better determine potential responsiveness to time-of-use pricing** *ENERGY POLICY*
Stelmach, G., Zanocco, C., Flora, J., Rajagopal, R., Boudet, H. S.
2020; 144
- **A Geometric Analysis of Power System Loadability Regions** *IEEE TRANSACTIONS ON SMART GRID*
Weng, Y., Rajagopal, R., Zhang, B.
2020; 11 (4): 3580–92
- **Data-Driven Load Modeling and Forecasting of Residential Appliances** *IEEE TRANSACTIONS ON SMART GRID*
Ji, Y., Buechler, E., Rajagopal, R.
2020; 11 (3): 2652–61

- **Pavement performance assessment using a cost-effective wireless accelerometer system** *COMPUTER-AIDED CIVIL AND INFRASTRUCTURE ENGINEERING*
Bajwa, R., Coleri, E., Rajagopal, R., Varaiya, P., Flores, C.
2020
- **Consumption change detection for urban planning: monitoring and segmenting water customers during drought** *Water Resources Research*
Bolorinos, J., Ajami, N. K., Rajagopal, R.
2020; 56 (3)
- **Activity Detection And Modeling Using Smart Meter Data: Concept And Case Studies**
Wang, H., Henri, G., Tan, C., Rajagopal, R., IEEE
IEEE.2020
- **Multi-Service Battery Operation with Cloud Electricity Storage**
Rasouli, M., Sun, T., Pache, C., Panciatici, P., Maeght, J., Johari, R., Rajagopal, R., IEEE
IEEE.2020
- **Urban2Vec: Incorporating Street View Imagery and POIs for Multi-Modal Urban Neighborhood Embedding**
Wang, Z., Li, H., Rajagopal, R., Assoc Advancement Artificial Intelligence
ASSOC ADVANCEMENT ARTIFICIAL INTELLIGENCE.2020: 1013-1020
- **DeepSolar for Germany: A deep learning framework for PV system mapping from aerial imagery**
Mayer, K., Wang, Z., Arlt, M., Neumann, D., Rajagopal, R., IEEE
IEEE.2020
- **Unbalanced multi-phase distribution grid topology estimation and bus phase identification** *IET SMART GRID*
Liao, Y., Weng, Y., Liu, G., Zhao, Z., Tan, C., Rajagopal, R.
2019; 2 (4): 557-570
- **Submodularity of Storage Placement Optimization in Power Networks** *IEEE TRANSACTIONS ON AUTOMATIC CONTROL*
Qin, J., Yang, I., Rajagopal, R.
2019; 64 (8): 3268–83
- **Reliability Value of Distributed Solar plus Storage Systems Amidst Rare Weather Events** *IEEE TRANSACTIONS ON SMART GRID*
Wang, J., Qin, J., Zhong, H., Rajagopal, R., Xia, Q., Kang, C.
2019; 10 (4): 4476–86
- **Incentive mechanism for sharing distributed energy resources** *JOURNAL OF MODERN POWER SYSTEMS AND CLEAN ENERGY*
Wang, J., Zhong, H., Qin, J., Tang, W., Rajagopal, R., Xia, Q., Kang, C.
2019; 7 (4): 837–50
- **Competition and Efficiency of Coalitions in Cournot Games With Uncertainty** *IEEE TRANSACTIONS ON CONTROL OF NETWORK SYSTEMS*
Zhang, B., Johari, R., Rajagopal, R.
2019; 6 (2): 884–96
- **PaToPaEM: A Data-Driven Parameter and Topology Joint Estimation Framework for Time-Varying System in Distribution Grids** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Yu, J., Weng, Y., Rajagopal, R.
2019; 34 (3): 1682–92
- **Structural Damage Detection and Localization with Unknown Postdamage Feature Distribution Using Sequential Change-Point Detection Method** *JOURNAL OF AEROSPACE ENGINEERING*
Liao, Y., Kiremidjian, A. S., Rajagopal, R., Loh, C.
2019; 32 (2)
- **Efficient Customer Selection Process for Various DR Objectives** *IEEE TRANSACTIONS ON SMART GRID*
Kwac, J., Kim, J., Rajagopal, R.
2019; 10 (2): 1501–8
- **Coordination of Distributed Energy Storage Under Spatial and Temporal Data Asymmetry** *IEEE TRANSACTIONS ON SMART GRID*

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- Anderson, K., Rajagopal, R., El Gamal, A.
2019; 10 (2): 1184–94
- **Urban MV and LV Distribution Grid Topology Estimation via Group Lasso** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Liao, Y., Weng, Y., Liu, G., Rajagopal, R.
2019; 34 (1): 12–27
 - **Curtailement Contract Design for HVAC Systems**
Arlt, M., Neumann, D., Rajagopal, R., IEEE
IEEE.2019: 3889-3894
 - **An Energy Lifestyles Program for Tweens: A Pilot Study**
Mauriello, M., Zanicco, C., Stelmach, G., Flora, J., Boudet, H., Rajagopal, R., Assoc Comp Machinery
ASSOC COMPUTING MACHINERY.2019
 - **Forecasting Residential Monthly Electricity Consumption using Smart Meter Data**
Ignatiadis, D., Henri, G., Rajagopal, R., IEEE
IEEE.2019
 - **Siamese Generative Adversarial Privatizer for Biometric Data**
Oleszkiewicz, W., Kairouz, P., Piczak, K., Rajagopal, R., Trzcinski, T., Jawahar, C. V., Li, H., Mori, G., Schindler, K.
SPRINGER INTERNATIONAL PUBLISHING AG.2019: 482–97
 - **Congestion management within a multi-service scheduling coordination scheme for large battery storage systems**
Straub, C., Maeght, J., Pache, C., Panciatici, P., Rajagopal, R., IEEE
IEEE.2019
 - **DeepSolar: A Machine Learning Framework to Efficiently Construct a Solar Deployment Database in the United States** *JOULE*
Yu, J., Wang, Z., Majumdar, A., Rajagopal, R.
2018; 2 (12): 2605–17
 - **Flexible Market for Smart Grid: Coordinated Trading of Contingent Contracts** *IEEE TRANSACTIONS ON CONTROL OF NETWORK SYSTEMS*
Qin, J., Rajagopal, R., Varaiya, P.
2018; 5 (4): 1657–67
 - **Tri-Level Expansion Planning for Transmission Networks and Distributed Energy Resources Considering Transmission Cost Allocation** *IEEE TRANSACTIONS ON SUSTAINABLE ENERGY*
Wang, J., Zhong, H., Tang, W., Rajagopal, R., Xia, Q., Kang, C.
2018; 9 (4): 1844–56
 - **Economic Benefits of Integrating Solar-Powered Heat Pumps Into a CHP System** *IEEE TRANSACTIONS ON SUSTAINABLE ENERGY*
Wang, J., Zhong, H., Tan, C., Chen, X., Rajagopal, R., Xia, Q., Kang, C.
2018; 9 (4): 1702–12
 - **Probabilistic baseline estimation based on load patterns for better residential customer rewards** *INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS*
Weng, Y., Yu, J., Rajagopal, R.
2018; 100: 508–16
 - **Actively Calibrated Line Mountable Capacitive Voltage Transducer for Power Systems Applications** *IEEE TRANSACTIONS ON SMART GRID*
Sevlian, R., Rajagopal, R.
2018; 9 (5): 3942–53
 - **PaToPa: A Data-Driven Parameter and Topology Joint Estimation Framework in Distribution Grids** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Yu, J., Weng, Y., Rajagopal, R.
2018; 33 (4): 4335–47
 - **Lifestyle Segmentation Based on Energy Consumption Data** *IEEE TRANSACTIONS ON SMART GRID*
Kwac, J., Flora, J., Rajagopal, R.
2018; 9 (4): 2409–18

- **A scaling law for short term load forecasting on varying levels of aggregation** *INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS*
Sevlian, R., Rajagopal, R.
2018; 98: 350–61
- **Performance guaranteed state estimation for renewable penetration with improved meters** *JOURNAL OF ENGINEERING-JOE*
Weng, Y., Yu, J., Rajagopal, R.
2018: 323–31
- **Benchmarking building energy efficiency using quantile regression** *ENERGY*
Roth, J., Rajagopal, R.
2018; 152: 866–76
- **Good Consumer or Bad Consumer: Economic Information Revealed From Demand Profiles** *IEEE TRANSACTIONS ON SMART GRID*
Yu, Y., Liu, G., Zhu, W., Wang, F., Shu, B., Zhang, K., Astier, N., Rajagopal, R.
2018; 9 (3): 2347–58
- **Robust Building Energy Load Forecasting Using Physically-Based Kernel Models** *ENERGIES*
Prakash, A., Xu, S., Rajagopal, R., Noh, H.
2018; 11 (4)
- **Finding the Right Consumers for Thermal Demand-Response: An Experimental Evaluation** *IEEE TRANSACTIONS ON SMART GRID*
Albert, A., Rajagopal, R.
2018; 9 (2): 564–72
- **Outage Detection Using Load and Line Flow Measurements in Power Distribution Systems** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Sevlian, R., Zhao, Y., Rajagopal, R., Goldsmith, A., Poor, H.
2018; 33 (2): 2053–69
- **The wavelet transform as a Gaussian process for damage detection** *STRUCTURAL CONTROL & HEALTH MONITORING*
Balafas, K., Kiremidjian, A. S., Rajagopal, R.
2018; 25 (2)
- **Balancing marine ecosystem impact and freshwater consumption with water-use fees in California's power markets: An evaluation of possibilities and trade-offs** *Balancing marine ecosystem impact and freshwater consumption with water-use fees in California's power markets: An evaluation of possibilities and trade-offs*
Bolorinos, J., Yu, Y., Ajami, N. K., Rajagopal, R.
2018; 226 (C): 644-654
- **A Two-layer Decentralized Control Architecture for DER Coordination**
Navidi, T., El Gamal, A., Rajagopal, R., IEEE
IEEE.2018: 6019–24
- **Understanding Compressive Adversarial Privacy**
Chen, X., Kairouz, P., Rajagopal, R., IEEE
IEEE.2018: 6824–31
- **Good Consumer or Bad Consumer: Economic Information Revealed from Demand Profiles**
Yu, Y., Liu, G., Zhu, W., Wang, F., Shu, B., Zhang, K., Rajagopal, R., Astier, N., IEEE
IEEE.2018
- **Automatic Power Exchange for Distributed Energy Resource Networks: Flexibility Scheduling and Pricing**
Qin, J., Mather, J., Joo, J., Rajagopal, R., Poolla, K., Varaiya, P., IEEE
IEEE.2018: 1572–79
- **Context-Aware Generative Adversarial Privacy** *ENTROPY*
Huang, C., Kairouz, P., Chen, X., Sankar, L., Rajagopal, R.
2017; 19 (12)
- **Optimal bidding strategy for microgrids in joint energy and ancillary service markets considering flexible ramping products** *APPLIED ENERGY*
Wang, J., Zhong, H., Tang, W., Rajagopal, R., Xia, Q., Kang, C., Wang, Y.

2017; 205: 294–303

- **Distributed Energy Resources Topology Identification via Graphical Modeling** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Weng, Y., Liao, Y., Rajagopal, R.
2017; 32 (4): 2682-2694
- **Development of a Cost-Effective Wireless Vibration Weigh-In-Motion System to Estimate Axle Weights of Trucks** *COMPUTER-AIDED CIVIL AND INFRASTRUCTURE ENGINEERING*
Bajwa, R., Coleri, E., Rajagopal, R., Varaiya, P., Flores, C.
2017; 32 (6): 443-457
- **Data-driven planning of distributed energy resources amidst socio-technical complexities** *Nature Energy*
Jain, R. K., Qin, J., Rajagopal, R.
2017
- **Regularization in Hierarchical Time Series Forecasting with Application to Electricity Smart Meter Data**
Ben Taieb, S., Yu, J., Barreto, M., Rajagopal, R., AAAI
ASSOC ADVANCEMENT ARTIFICIAL INTELLIGENCE.2017: 4474-4480
- **The Heterogeneity of Thermal Sensitivity of Residential Electricity Load between China and USA**
Yu, J., Zhou, Y., Tabone, M., Gao, Q., Tan, C., Kiliccote, S., Wu, L., Rajagopal, R., Assoc Comp Machinery
ASSOC COMPUTING MACHINERY.2017
- **DEMAND AND FLEXIBILITY OF RESIDENTIAL APPLIANCES: AN EMPIRICAL ANALYSIS**
Ji, Y., Rajagopal, R., IEEE
IEEE.2017: 1020–24
- **The "Smart Dim Fuse": A New Approach to Load Control as a Distributed Energy Resource**
Goldin, A., Rajagopal, R., Rivetta, C., Davila, J., IEEE
IEEE.2017
- **Robust Mapping Rule Estimation for Power Flow Analysis in Distribution Grids**
Yu, J., Weng, Y., Rajagopal, R., IEEE
IEEE.2017
- **On Certainty Equivalence of Demand Charge Reduction Using Storage**
Yu, J., Qin, J., Rajagopal, R., IEEE
IEEE.2017: 3430–37
- **Energy Storage Sharing Strategy in Distribution Networks Using Bi-level Optimization Approach**
Chen, H., Yu, Y., Hu, Z., Luo, H., Tan, C., Rajagopal, R., IEEE
IEEE.2017
- **Data-Driven Joint Topology and Line Parameter Estimation for Renewable Integration**
Yu, J., Weng, Y., Rajagopal, R., IEEE
IEEE.2017
- **Approximation Algorithms for Optimization of Combinatorial Dynamical Systems** *IEEE TRANSACTIONS ON AUTOMATIC CONTROL*
Yang, I., Burden, S. A., Rajagopal, R., Sastry, S. S., Tomlin, C. J.
2016; 61 (9): 2644-2649
- **Data-Driven Targeting of Customers for Demand Response** *IEEE TRANSACTIONS ON SMART GRID*
Kwac, J., Rajagopal, R.
2016; 7 (5): 2199-2207
- **Online Modified Greedy Algorithm for Storage Control Under Uncertainty** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Qin, J., Chow, Y., Yang, J., Rajagopal, R.
2016; 31 (3): 1729-1743
- **Scheduling Non-Preemptive Deferrable Loads** *IEEE TRANSACTIONS ON POWER SYSTEMS*
O'Brien, G., Rajagopal, R.

2016; 31 (2): 835-845

- **Distributed Online Modified Greedy Algorithm for Networked Storage Operation Under Uncertainty** *IEEE TRANSACTIONS ON SMART GRID*
Qin, J., Chow, Y., Yang, J., Rajagopal, R.
2016; 7 (2): 1106-1118
- **Parking Sensing and Information System Sensors, Deployment, and Evaluation** *TRANSPORTATION RESEARCH RECORD*
Chen, X., Qian, Z. (., Rajagopal, R., Stiers, T., Flores, C., Kavalier, R., Williams, F.
2016: 81-89
- **Autoregressive Model for Individual Consumption Data - Sparsity Recovery and Significance Test**
Li, P., Zhang, B., Weng, Y., Rajagopal, R., IEEE
IEEE.2016
- **Assessing Climate Change Vulnerability of Microgrid Systems**
Yu, Y., Moy, K. R., Chapman, W. E., O'Neill, P. L., Rajagopal, R., IEEE
IEEE.2016
- **Powernet for Distributed Energy Resource Networks**
Radovanovic, A., Ramesh, A., Koningsstein, R., Fork, D., Weber, W., Kim, S., Schmalzried, J., Sastry, J., Dikovskiy, M., Bozhkov, K., Pinheiro, E., Lebsack, C., Collyer, et al
IEEE.2016
- **Structural Health Monitoring approach for detecting ice accretion on bridge cable using the Haar Wavelet Transform**
Andre, J., Kiremidjian, A., Liao, Y., Georgakis, C., Rajagopal, R., Lynch, J. P.
SPIE-INT SOC OPTICAL ENGINEERING.2016
- **Angular Velocity-based Structural Damage Detection**
Liao, Y., Kiremidjian, A. S., Rajagopal, R., Loh, C., Lynch, J. P.
SPIE-INT SOC OPTICAL ENGINEERING.2016
- **Predictability, Constancy and Contingency in Electric Load Profiles**
Wu, C., Tang, W., Poolla, K., Rajagopal, R., IEEE
IEEE.2016
- **Model and Data Analysis of Two-Settlement Electricity Market with Virtual Bidding**
Tang, W., Rajagopal, R., Poolla, K., Varaiya, P., IEEE
IEEE.2016: 6645-6650
- **Submodularity of Energy Storage Placement in Power Networks**
Qin, J., Yang, I., Rajagopal, R., IEEE
IEEE.2016: 686-693
- **Urban Distribution Grid Line Outage Identification**
Liao, Y., Weng, Y., Tan, C., Rajagopal, R., IEEE
IEEE.2016
- **Online Modified Greedy Algorithm for Storage Control Under Uncertainty**
Qin, J., Chow, Y., Yang, J., Rajagopal, R., IEEE
IEEE.2016
- **Urban Distribution Grid Topology Reconstruction via Lasso**
Liao, Y., Weng, Y., Rajagopal, R., IEEE
IEEE.2016
- **Shapley Value Estimation for Compensation of Participants in Demand Response Programs** *IEEE TRANSACTIONS ON SMART GRID*
O'Brien, G., El Gamal, A., Rajagopal, R.
2015; 6 (6): 2837-2844
- **Optimal allocation of computational resources in hydrogeological models under uncertainty** *ADVANCES IN WATER RESOURCES*
Moslehi, M., Rajagopal, R., de Barros, F. P.

2015; 83: 299-309

- **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*
Kavousian, A., Rajagopal, R., Fischer, M.
2015; 99: 220-230
- **Wind Aggregation Via Risky Power Markets** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Zhao, Y., Qin, J., Rajagopal, R., Goldsmith, A., Poor, H. V.
2015; 30 (3): 1571-1581
- **Competition and Coalition Formation of Renewable Power Producers** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Zhang, B., Johari, R., Rajagopal, R.
2015; 30 (3): 1624-1632
- **Optimal dynamic pricing for morning commute parking** *TRANSPORTMETRICA A-TRANSPORT SCIENCE*
Qian, Z. (., Rajagopal, R.
2015; 11 (4): 291-316
- **Structural health monitoring of progressive damage** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
Mollineaux, M., Rajagopal, R.
2015; 44 (4): 583-600
- **Thermal Profiling of Residential Energy Use** *IEEE TRANSACTIONS ON POWER SYSTEMS*
Albert, A., Rajagopal, R.
2015; 30 (2): 602-611
- **The impacts of electricity dispatch protocols on the emission reductions due to wind power and carbon tax.** *Environmental science & technology*
Yu, Y., Rajagopal, R.
2015; 49 (4): 2568-2576
- **Where Ds My Parking Spot? Online and Offline Prediction of Time-Varying Parking Occupancy** *TRANSPORTATION RESEARCH RECORD*
Tamrazian, A., Qian, Z. (., Rajagopal, R.
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