

Benjamin D. Leibowicz

ETC 5.128D
204 E. Dean Keeton St., Stop C2200
Austin, TX 78712

Phone: (512) 475-9550
Email: bleibowicz@utexas.edu
Homepage: <http://sites.utexas.edu/leibowicz>

Current Academic Position

Assistant Professor (2016–Present)
Graduate Program in Operations Research and Industrial Engineering
Department of Mechanical Engineering
Graduate Program in Energy and Earth Resources
Lyndon B. Johnson School of Public Affairs (by courtesy)
The University of Texas at Austin

Education

Ph.D.	Stanford University	Management Science and Engineering	2016
M.S.	Stanford University	Management Science and Engineering	2013
A.B.	Harvard University	Physics (magna cum laude, Economics minor)	2011

Primary Research Fields

Energy systems, energy and climate policy analysis, integrated assessment modeling, sustainable cities, technological change, innovation

Publications¹

Refereed Journal Articles

- [16] Jones, E.C.*, **Leibowicz, B.D.**, 2019. Contributions of shared autonomous vehicles to climate change mitigation. *Transportation Research Part D: Transport and Environment* 72, 279–298.
- [15] **Leibowicz, B.D.**, Punjabi, K.*, O’Shaughnessy, E., Margolis, R., 2019. Rules of the rooftop: Platform design and price reductions in an online solar photovoltaic marketplace in the United States. *Energy Research & Social Science* 48, 194–204.
- [14] **Leibowicz, B.D.**, Lanham, C.M.*, Brozynski, M.T.*, Vázquez-Canteli, J.R.*, Castillo Castejón, N.*, Nagy, Z., 2018. Optimal decarbonization pathways for urban residential building energy services. *Applied Energy* 230, 1311–1325.
- [13] Brozynski, M.T.*, **Leibowicz, B.D.**, 2018. Decarbonizing power and transportation at the urban scale: An analysis of the Austin, Texas Community Climate Plan. *Sustainable Cities and Society* 43, 41–54.

¹ * denotes a student co-author.

- [12] Deetjen, T.A.*, Conger, J.P.*, **Leibowicz, B.D.**, Webber, M.E., 2018. Review of climate action plans in 29 major U.S. cities: Comparing current policies to research recommendations. *Sustainable Cities and Society* 41, 711–727.
- [11] **Leibowicz, B.D.**, 2018. Policy recommendations for a transition to sustainable mobility based on historical diffusion dynamics of transport systems. *Energy Policy* 119, 357–366.
- [10] Vitter, J.S.*, Berhanu, B.*, Deetjen, T.A.*, **Leibowicz, B.D.**, Webber, M.E., 2018. Optimal sizing and dispatch for a community-scale potable water recycling facility. *Sustainable Cities and Society* 39, 225–240.
- [9] **Leibowicz, B.D.**, 2018. Welfare improvement windows for innovation policy. *Research Policy* 47, 390–398.
- [8] **Leibowicz, B.D.**, 2018. The cost of policy uncertainty in electric sector capacity planning: Implications for instrument choice. *The Electricity Journal* 31, 33–41.
- [7] **Leibowicz, B.D.**, 2017. Effects of urban land-use regulations on greenhouse gas emissions. *Cities* 70, 135–152.
- [6] **Leibowicz, B.D.**, Krey, V., Grubler, A., 2016. Representing spatial technology diffusion in an energy system optimization model. *Technological Forecasting and Social Change* 103, 350–363.
- [5] **Leibowicz, B.D.**, 2015. Growth and competition in renewable energy industries: Insights from an integrated assessment model with strategic firms. *Energy Economics* 52, 13–25.
- [4] Wilkerson, J.T., **Leibowicz, B.D.**, Turner, D.D., Weyant, J., 2015. Comparison of integrated assessment models: Carbon price impacts on U.S. energy. *Energy Policy* 76, 18–31.
- [3] **Leibowicz, B.D.**, 2014. Evaluation of post-Fukushima Japanese electricity strategies: A stochastic simulation model. *International Journal of Energy Research* 38, 1578–1598.
- [2] **Leibowicz, B.D.**, Roumpani, M., Larsen, P.H., 2013. Carbon emissions caps and the impact of a radical change in nuclear electricity costs. *International Journal of Energy Economics and Policy* 3, 60–74.
- [1] **Leibowicz, B.D.**, Abbot, D.S., Emanuel, K., Tziperman, E., 2012. Correlation between present-day model simulation of Arctic cloud radiative forcing and sea ice consistent with positive winter convective cloud feedback. *Journal of Advances in Modeling Earth Systems* 4.

Refereed Journal Articles Under Review

- [11] Bandyopadhyay, A.*, **Leibowicz, B.D.**, Beagle, E.A., Webber, M.E. As one falls, another rises? Residential peak load reduction through electricity rate structures.
- [10] Brozynski, M.T.*, **Leibowicz, B.D.** Markov models of policy support for technology transitions.
- [9] Calci, B.*, **Leibowicz, B.D.**, Bard, J.F. Not on my coast? North American natural gas markets under LNG demand growth and infrastructure restrictions. **Finalist for the 2019 Dennis J. O'Brien USAEE/IAEE Best Student Paper Award.**
- [8] Jayadev, G.*, **Leibowicz, B.D.**, Kutanoglu, E. U.S. electricity infrastructure of the future: Generation and transmission pathways through 2050.
- [7] Kamei, M., Wangmo, T., **Leibowicz, B.D.**, Nishioka, S. Urbanization, carbon neutrality, and Gross National Happiness: Sustainable development pathways for Bhutan.

- [6] **Leibowicz, B.D.** Urban land use and transportation planning for climate change mitigation: A theoretical framework.
- [5] Naeini, M.E.*, **Leibowicz, B.D.**, Bickel, J.E. Can you trust a model whose output keeps changing? Retrospective model evaluation and the evolving social cost of carbon.
- [4] Phathanapirom, U.*, Haas, D.A., **Leibowicz, B.D.** A game-theoretic approach to nuclear fuel cycle transition analysis under uncertainty.
- [3] Waxman, A.R., Khomaini, A.*, **Leibowicz, B.D.**, Olmstead, S.M. Emissions in the stream: Estimating the greenhouse gas impacts of an oil and gas boom.
- [2] Zhang, N.*, **Leibowicz, B.D.**, Hanasusanto, G.A. Optimal residential battery storage operations using robust data-driven dynamic programming.
- [1] Zhu, Q.*, **Leibowicz, B.D.** Vehicle efficiency improvements, urban form, and energy use impacts.

Refereed Conference Papers

- [7] Bandyopadhyay, A.*, Conger, J.P.*, Webber, M.E., **Leibowicz, B.D.**, 2019. A decision support tool for distributed solar and storage investments: A case study in Austin, TX. Proceedings of the *ASME International Mechanical Engineering Congress & Exposition*, Salt Lake City, UT.
- [6] Bandyopadhyay, A.*, Ramirez-Meyers, K.*, Wikramanayake, E.D.*, **Leibowicz, B.D.**, Webber, M.E., Bahadur, V., 2019. A capacity planning model for microgrids in rural India. Proceedings of the *ASME International Mechanical Engineering Congress & Exposition*, Salt Lake City, UT.
- [5] **Leibowicz, B.D.**, 2017. The cost of policy uncertainty in electric sector capacity planning: Implications for instrument choice. Proceedings of the *35th USAEE/IAEE North American Conference*, Houston, TX.
- [4] **Leibowicz, B.D.**, 2017. Effects of urban land-use regulations on greenhouse gas emissions. Proceedings of the *2017 International Energy Workshop*, College Park, MD.
- [3] **Leibowicz, B.D.**, 2016. Technology-push, demand-pull, and strategic R&D investment. Proceedings of the *34th USAEE/IAEE North American Conference*, Tulsa, OK.
- [2] **Leibowicz, B.D.**, 2015. Growth and competition in renewable energy industries: Insights from an integrated assessment model with strategic firms. Proceedings of the *33rd USAEE/IAEE North American Conference*, Pittsburgh, PA.
- [1] **Leibowicz, B.D.**, 2013. Representing international technology spillovers in a computable general equilibrium energy-economic model. Proceedings of the *2013 International Energy Workshop*, Paris, France.

Non-Refereed Technical Reports and White Papers

- [3] **Leibowicz, B.D.**, Punjabi, K.*, O'Shaughnessy, E., Margolis, R., 2018. Effects of platform design on the customer experience in an online solar PV marketplace. *National Renewable Energy Laboratory Technical Report 6A20-71178*.
- [2] **Leibowicz, B.D.**, 2017. Cities can work on climate change – with the right policies. City of Austin, Office of Sustainability, Rethink White Papers.

- [1] Grubler, A., **Leibowicz, B.D.**, Krey, V., Bento, N., Riahi, K., 2014. Lessons learned from technology diffusion in the past for future scenarios – integrating the influence of costs, size, and market characteristics into integrated assessment models. RITE-IIASA collaborative study, Alternative pathways toward sustainable development and climate stabilization (ALPS) II project, final report.

Op-Eds

- [8] **Leibowicz, B.D.**, Farhat, K. How Amazon can use its HQ2 search to boost clean energy. *Dallas Morning News*, March 15, 2018.
- [7] **Leibowicz, B.D.**, Farhat, K. How Amazon’s HQ2 could advance the clean energy economy. *Austin American-Statesman*, March 13, 2018.
- [6] Farhat, K., **Leibowicz, B.D.** Can Amazon make us greener? *Houston Chronicle*, March 7, 2018.
- [5] **Leibowicz, B.D.** Uncertain effects with driverless vehicles. *San Antonio Express-News*, December 9, 2017.
- [4] **Leibowicz, B.D.** Shared autonomous vehicles could do more harm than good. *Austin American-Statesman*, November 29, 2017.
- [3] **Leibowicz, B.D.** With right policies, cities can curb climate change. *Houston Chronicle*, June 28, 2017.
- [2] **Leibowicz, B.D.** Cities can work on climate change – with the right policies. *Austin American-Statesman*, June 19, 2017.
- [1] **Leibowicz, B.D.** U.S. Cities Don’t Need the Paris Accord to Fight Climate Change. *Fortune*, June 13, 2017.

Presentations²

Conference Presentations

- [39] **Leibowicz, B.D.**, Jayadev, G.*, Kutanoglu, E., 2019. U.S. electricity infrastructure of the future: Generation and transmission pathways through 2050. *USAEE/IAEE North American Conference*, Denver, CO.
- [38] Calci, B.*, **Leibowicz, B.D.**, Bard, J.F., 2019. Not on my coast? North American natural gas markets under LNG demand growth and infrastructure restrictions. *USAEE/IAEE North American Conference*, Denver, CO. **Finalist for the 2019 Dennis J. O’Brien USAEE/IAEE Best Student Paper Award.**
- [37] **Leibowicz, B.D.**, Zhang, N.*, Hanasusanto, G.A., 2019. Optimal residential battery storage operations using robust data-driven dynamic programming. *INFORMS Annual Meeting*, Seattle, WA.
- [36] **Leibowicz, B.D.**, Jayadev, G.*, Kutanoglu, E., 2019. U.S. electricity infrastructure of the future: Generation and transmission pathways through 2050. *INFORMS Annual Meeting*, Seattle, WA.
- [35] Zhang, N.*, Carvallo, J.P., **Leibowicz, B.D.**, Larsen, P.H., Murphy, S., 2019. Generation and transmission planning with decentralized distributed resource decision making. *INFORMS Annual Meeting*, Seattle, WA.
- [34] Brozynski, M.T.*, **Leibowicz, B.D.**, 2019. A game-theoretic model of infrastructure-dependent technology adoption: Overcoming the chicken-and-egg problem. *INFORMS Annual Meeting*, Seattle, WA.

² * denotes a student co-author. The first author listed was the presenter.

- [33] Bandyopadhyay, A.*, Ramirez-Meyers, K.*, Wikramanayake, E.D.*, **Leibowicz, B.D.**, Webber, M.E., Bahadur, V., 2019. A capacity planning model for microgrids in rural India. *ASME International Mechanical Engineering Congress & Exposition*, Salt Lake City, UT.
- [32] Bandyopadhyay, A.*, Conger, J.P.*, Webber, M.E., **Leibowicz, B.D.**, 2019. A decision support tool for distributed solar and storage investments: A case study in Austin, TX. *ASME International Mechanical Engineering Congress & Exposition*, Salt Lake City, UT.
- [31] Bandyopadhyay, A.*, **Leibowicz, B.D.**, Conger, J.P.*, Beagle, E.A., Webber, M.E., 2019. A convex optimization tool to model customer behavioral issues in demand response initiatives in the residential sector. *Texas A&M Conference on Energy*, College Station, TX.
- [30] **Leibowicz, B.D.**, 2019. **Plenary Panelist:** Sustainable Development Goals 7 and 11: Affordable and clean energy in a context of rapid urbanization. *Sustainable Built Environment Conference*, Tokyo, Japan.
- [29] **Leibowicz, B.D.**, Lanham, C.M.*, Brozynski, M.T.*, Vázquez-Canteli, J.R.*, Castillo Castejón, N.*, Nagy, Z., 2019. Optimal decarbonization pathways for urban residential building energy services. *Sustainable Built Environment Conference*, Tokyo, Japan.
- [28] Jayadev, G.*, **Leibowicz, B.D.**, Kutanoglu, E., 2019. U.S. energy infrastructure of the future: Electricity capacity planning through 2050. *International Conference on Continuous Optimization (ICCOPT)*, Berlin, Germany.
- [27] **Leibowicz, B.D.**, 2019. Urban land use and transportation planning for climate change mitigation: A theoretical framework. *INFORMS International Meeting*, Cancun, Mexico.
- [26] Calci, B.*, **Leibowicz, B.D.**, Bard, J.F., 2019. A North American natural gas market model with endogenous reserves and exploration. *IAEE International Conference*, Montreal, Canada.
- [25] Bandyopadhyay, A.*, Conger, J.P.*, Webber, M.E., **Leibowicz, B.D.**, 2019. A techno-economic model to assess optimal distributed energy resource investments in the residential sector. *IAEE International Conference*, Montreal, Canada.
- [24] Zhang, N.*, **Leibowicz, B.D.**, Hanasusanto, G.A., 2019. Optimal residential battery storage operations using robust data-driven dynamic programming. *IISE Annual Conference & Expo*, Orlando, FL.
- [23] **Leibowicz, B.D.**, Brozynski, M.T.*, 2019. Markov models of policy support for technology transitions. *IISE Annual Conference & Expo*, Orlando, FL.
- [22] Brozynski, M.T.*, **Leibowicz, B.D.**, 2018. Markov models of policy support for technology transitions. *INFORMS Annual Meeting*, Phoenix, AZ.
- [21] Jayadev, G.*, **Leibowicz, B.D.**, Kutanoglu, E., 2018. U.S. energy infrastructure of the future: Electric sector pathways through 2050. *INFORMS Annual Meeting*, Phoenix, AZ.
- [20] **Leibowicz, B.D.**, 2018. Representing the demand side in energy system optimization models. *INFORMS Annual Meeting*, Phoenix, AZ.
- [19] Jones, E.C.*, **Leibowicz, B.D.**, 2018. The role of shared autonomous vehicles in climate change mitigation. *Graduate Education for Minorities (GEM) Annual Board Meeting and Conference*, Los Angeles, CA.
- [18] **Leibowicz, B.D.**, Punjabi, K.*, O'Shaughnessy, E., Margolis, R., 2018. Effects of platform design on solar PV prices in an online marketplace. *IAEE International Conference*, Groningen, Netherlands.

- [17] Bandyopadhyay, A.*, Ramirez-Meyers, K.*, Wikramanayake, E.D.*, **Leibowicz, B.D.**, Webber, M.E., Bahadur, V. A capacity planning model for microgrids in rural India. *IAEE International Conference*, Groningen, Netherlands.
- [16] **Leibowicz, B.D.**, Brozynski, M.T.*, 2018. Decarbonizing power and transportation at the urban scale: An analysis of the Austin, Texas Community Climate Plan. *International Energy Workshop*, Gothenburg, Sweden.
- [15] **Leibowicz, B.D.**, 2018. Effects of urban land-use regulations on greenhouse gas emissions. *Inter-governmental Panel on Climate Change (IPCC) Cities and Climate Change Science Conference*, Edmonton, Canada.
- [14] **Leibowicz, B.D.**, 2017. The cost of policy uncertainty in electric sector capacity planning: Implications for instrument choice. *Energy Policy Research Conference*, Park City, UT.
- [13] **Leibowicz, B.D.**, 2017. The cost of policy uncertainty in electric sector capacity planning: Implications for instrument choice. *INFORMS Annual Meeting*, Houston, TX.
- [12] **Leibowicz, B.D.**, 2017. Policy recommendations for a transition to sustainable mobility based on historical diffusion dynamics of transport systems. *INFORMS Annual Meeting*, Houston, TX, 2017.
- [11] Brozynski, M.T.*, **Leibowicz, B.D.**, 2017. Optimal pathways to net-zero emissions: A study of Austin, Texas. *INFORMS Annual Meeting*, Houston, TX.
- [10] Vitter, J.S.*, Berhanu, B.*, Deetjen, T.A.*, **Leibowicz, B.D.**, Webber, M.E., 2018. Optimal dispatch and equipment sizing of a community-scale water recycling facility for electric demand flexibility. *INFORMS Annual Meeting*, Houston, TX.
- [9] **Leibowicz, B.D.**, 2017. Effects of urban land-use regulations on greenhouse gas emissions. *International Energy Workshop*, College Park, MD.
- [8] **Leibowicz, B.D.**, 2017. The cost of policy uncertainty in electric sector capacity planning: Implications for instrument choice. *USAEE/IAEE North American Conference*, Houston, TX.
- [7] **Leibowicz, B.D.**, 2016. Technology-push, demand-pull, and strategic R&D investment. *INFORMS Annual Meeting*, Nashville, TN.
- [6] **Leibowicz, B.D.**, 2016. Technology-push, demand-pull, and strategic R&D investment. *USAEE/IAEE North American Conference*, Tulsa, OK.
- [5] **Leibowicz, B.D.**, 2015. Growth and competition in renewable energy industries: Insights from an integrated assessment model with strategic firms. *USAEE/IAEE North American Conference*, Pittsburgh, PA.
- [4] **Leibowicz, B.D.**, Krey, V., Grubler, A., 2014. Representing spatial technology diffusion in an energy system optimization model. *Energy Systems Conference*, London, United Kingdom.
- [3] **Leibowicz, B.D.**, Krey, V., Grubler, A., 2014. Representing spatial technology diffusion in an energy system optimization model. *Integrated Assessment Modeling Consortium Annual Meeting*, College Park, MD.
- [2] **Leibowicz, B.D.**, 2013. Representing international technology spillovers in a computable general equilibrium energy-economic model. *International Energy Workshop*, Paris, France.
- [1] **Leibowicz, B.D.**, 2013. Representing international technology spillovers in a computable general equilibrium energy-economic model. *The University of Texas at Austin Energy Forum*, Austin, TX.

Invited Lectures and Seminars

- [8] **Leibowicz, B.D.**, 2019. Urban land use and transportation planning for climate change mitigation: A theoretical framework. *Institute for Global Environmental Strategies*, Kamakura, Japan.
- [7] **Leibowicz, B.D.**, 2019. Robust data-driven dynamic programming and applications in energy storage. *Idaho National Laboratory*, Idaho Falls, ID.
- [6] **Leibowicz, B.D.**, 2018. Cities and global change: Trends, policy developments, and research directions. *International Institute for Applied Systems Analysis*, Laxenburg, Austria.
- [5] **Leibowicz, B.D.**, 2017. Integrated systems modeling of energy, the economy, and the environment. *Sandia National Laboratories*, Albuquerque, NM.
- [4] **Leibowicz, B.D.**, 2017. Effects of urban land-use regulations on greenhouse gas emissions. *U.S. Green Building Council, Central Texas Chapter*, Austin, TX.
- [3] **Leibowicz, B.D.**, 2016. Growth and competition in renewable energy industries: Insights from an integrated assessment model with strategic firms. *The Ohio State University*, Columbus, OH.
- [2] **Leibowicz, B.D.**, 2016. Growth and competition in renewable energy industries: Insights from an integrated assessment model with strategic firms. *The University of Texas at Austin*, Austin, TX.
- [1] **Leibowicz, B.D.**, 2015. Technology-push, demand-pull, and strategic R&D investment. *Stanford Environmental and Energy Policy Analysis Center*, Stanford, CA.

Invited Workshop Participation

- [3] **Participant.** *Heat Storage for Gen IV Reactors for Variable Electricity from Base-load Reactors*, Idaho Falls, ID, 2019. Convened by MIT, Idaho National Laboratory, and Exelon.
- [2] **Commentator.** *Workshop on Accelerating Climate-Mitigating Technology Development and Deployment*, College Park, MD, 2018. Convened by the Harvard Kennedy School and the University of Maryland. Organizers included John Holdren (former Director of the Office of Science and Technology Policy) and Ellen Williams (former Director of ARPA-E).
- [1] **Participant.** *Sandia National Laboratories Academic Alliance Faculty Field Day*, Livermore, CA, 2018.

Research Grants and Contracts

External Research Grants and Contracts

- [4] LBNL Electricity Markets and Policy Group
Sponsor: Lawrence Berkeley National Laboratory
Total Funding: \$75,000 **Dates:** March 2019 – March 2020
Role: PI
- [3] Strategies for Mitigating Climate Impacts of Gulf Coast Industrial Facilities
Sponsor: The Cynthia and George Mitchell Foundation
Total Funding: \$62,851 **Dates:** March 2019 – December 2019
Role: Co-PI **Collaborators:** Andrew Waxman (PI), Sheila Olmstead (Co-PI)

- [2] NRT-INFEWS: Graduate Student Education: Reducing Energy Barriers for Novel Water Supply Use in Sustainable Agriculture
Sponsor: National Science Foundation
Total Funding: \$2,999,999 **Dates:** September 2018 – August 2023
Role: Co-PI **Collaborators:** Charles Werth (PI), David Eaton (Co-PI), Alex Huang (Co-PI), Polina Sela (Co-PI)
- [1] Energy Market Dynamic Modeling
Sponsor: ExxonMobil Upstream Research Company
Total Funding: \$619,508 **Dates:** June 2018 – May 2021
Role: Co-PI **Collaborators:** Jonathan Bard (PI), Thomas Edgar (Co-PI)

Internal Research Grants and Awards

- [2] Walker Scholar Award
Sponsor: UT Department of Mechanical Engineering
Total Funding: \$15,000 **Dates:** April 2019 – August 2021
Role: PI
- [1] Energy Infrastructure of the Future
Sponsor: UT Energy Institute
Total Funding: \$51,635 **Dates:** January 2018 – TBD
Role: PI

Previous Academic Positions

Research Assistant, Stanford University Energy Modeling Forum
Stanford, CA, 2012–16

Peccei Award Fellow, International Institute for Applied Systems Analysis
Laxenburg, Austria, 2014–15

Young Scientists Summer Program Fellow, International Institute for Applied Systems Analysis
Laxenburg, Austria, 2013

Research Assistant, Harvard University Center for the Environment
Cambridge, MA, 2008–10

Research in Industrial Projects for Students Fellow, Zuse Institute Berlin
Berlin, Germany, 2010

Research Experience for Undergraduates Fellow, Dalian University of Technology
Dalian, China, 2009

Simons Summer Research Fellow, Stony Brook University
Stony Brook, NY, 2006

Awards and Fellowships

Walker Scholar, UT Department of Mechanical Engineering, 2019

Peccei Award, International Institute for Applied Systems Analysis, 2014

Young Scientists Summer Program Fellowship, National Academy of Sciences, 2013

Second Place, Texas Energy Research Challenge, 2013

School of Engineering Fellowship, Stanford University, 2011

Research in Industrial Projects for Students Fellowship, Institute for Pure and Applied Mathematics, 2010

Research Experience for Undergraduates Fellowship, National Science Foundation, 2009

Simons Summer Research Fellowship, Stony Brook University, 2006

Teaching Experience

The University of Texas at Austin

ME 353: Engineering Finance
Fall 2017, 2019

ORI 397: Systems Modeling (new course)
Spring 2017, 2018, 2019

ORI 390R.1: Applied Probability
Fall 2016, 2018, 2019

ORI 397: Emerging Topics in ORIE
Fall 2018

Stanford University

Teaching Assistant, MS&E 295: Energy Policy Analysis
Winter 2013, 2015

Teaching Assistant, MS&E 294: Climate Policy Analysis
Winter 2014

Project Mentor, MS&E 152: Decision Analysis
Spring 2013

Professional Service

Journal Referee Service

Cities
Energies
Energy and Buildings
Energy Economics
Energy Policy
Energy Research and Social Science
Energy Sources, Part B: Economics, Planning, and Policy
Energy Systems
Environment International

Environmental Modelling and Software
 Environmental Research Letters
 European Journal of Comparative Economics
 European Journal of Operational Research
 Frontiers in Energy
 IISE Transactions
 International Journal of Electrical Power and Energy Systems
 International Journal of Energy Sector Management
 Journal of Cleaner Production
 Nature Climate Change
 PLoS ONE
 Sustainable Cities and Society
 The Engineering Economist

Advisory Committees

Academic Advisory Group for Carbon Reduction Assessment: New Enterprises (CRANE), PRIME Coalition, 2019–Present

Conference and Workshop Organization

Workshop Organization

Co-Organizer. *Sandia-UT Energy Collaboration Workshop*, Austin, TX, 2018.

Conference Planning Committees

Scientific Committee. *Sustainable Built Environment Conference*, Tokyo, Japan, 2019.

Cluster Chair

Co-Chair, Energy, Natural Resources, and the Environment (ENRE) – Energy. *INFORMS Annual Meeting*, Seattle, WA, 2019. Co-organized 40 sessions.
 Chair, Energy and Climate. *INFORMS Annual Meeting*, Phoenix, AZ, 2018. Organized 18 sessions.
 Chair, Energy and Climate. *INFORMS Annual Meeting*, Houston, TX, 2017. Organized 9 sessions.

Session Chair

The Challenges of Going Green: Solutions for Utilities and Firms. *INFORMS Annual Meeting*, Seattle, WA, 2019.
 The Future of Energy: A Systems Perspective. *INFORMS Annual Meeting*, Phoenix, AZ, 2018.
 Demand Modeling. *International Energy Workshop*, Gothenburg, Sweden, 2018.
 Energy and Climate Themes in Transportation. *INFORMS Annual Meeting*, Houston, TX, 2017.
 Systems Modeling Approaches to Energy Analysis. *INFORMS Annual Meeting*, Houston, TX, 2017.
 Future Pathways and Uncertainties. *International Energy Workshop*, College Park, MD, 2017.
 Energy III. *INFORMS Annual Meeting*, Nashville, TN, 2016.

Grant Proposal Review Service

Alfred P. Sloan Foundation
 ConTex Collaborative Research Grants
 National Science Foundation

Professional Society Memberships

Institute for Industrial & Systems Engineers (IISE)
Institute for Operations Research and the Management Sciences (INFORMS)
International Association for Energy Economics (IAEE)
United States Association for Energy Economics (USAEE)

University Service

The University of Texas at Austin

Leadership

Graduate Student Recruiting Coordinator, Operations Research and Industrial Engineering, 2016–Present

Committee Assignments

Graduate Student Recruiting Committee, Mechanical Engineering, 2016–Present

Mentoring

Faculty Mentor, Industrial Engineering & Management, ME Career Gateway Electives, 2019–Present

Judge for Student Research Competitions

Graduate and Industry Networking (GAIN)
Mechanical Engineering Graduate Recruitment Poster Session
UT Energy Week

Student Supervision

The University of Texas at Austin

Ph.D. Dissertation Supervisions: Completed

- [1] Urairisa “Birdy” Phathanapirom, Mechanical Engineering, Fall 2018, “Autonomous decision making in fuel cycle simulators using a game theoretic approach” (Co-advisor: Derek Haas).
Placement: Postdoctoral Research Associate, Oak Ridge National Laboratory

Ph.D. Dissertation Supervisions: In Progress

- [8] Arkasama Bandyopadhyay, Mechanical Engineering (Co-advisor: Michael Webber)
[7] Max Brozynski, Operations Research and Industrial Engineering
[6] Baturay Calci, Operations Research and Industrial Engineering (Co-advisor: Jonathan Bard)
[5] Gopika Jayadev, Operations Research and Industrial Engineering (Co-advisor: Erhan Kutanoglu)
[4] Erick Jones, Operations Research and Industrial Engineering
[3] Milad Naeni, Operations Research and Industrial Engineering (Co-advisor: Eric Bickel)
[2] Nan Zhang, Operations Research and Industrial Engineering
[1] Qianru Zhu, Operations Research and Industrial Engineering

M.S. Thesis Supervisions: Completed

- [2] Christopher Lanham, Energy and Earth Resources, Spring 2018, "Optimal decarbonization pathways for urban residential building energy services." **Winner of the Director's Award for the best Energy and Earth Resources theses.**

Placement: Project Engineer, Bluewing Midstream

- [1] Peter Tutton, Energy and Earth Resources, Spring 2018, "Carbon capture and storage network optimization under uncertainty" (Co-advisor: Susan Hovorka). **Winner of the Director's Award for the best Energy and Earth Resources theses.**

Placement: Research Scientist, Bureau of Economic Geology, UT Austin

M.S. Thesis Supervisions: In Progress

- [1] Cade Bourque, Mechanical Engineering (Co-advisor: Sheldon Landsberger)

M.S. Report Supervisions: Completed

- [1] Kunal Punjabi, Operations Research and Industrial Engineering, Fall 2017, "Effects of platform design on solar PV prices in an online marketplace."

Placement: Software Engineer, Amazon

Undergraduate Research Supervisions: Completed

- [1] Anmol Mathur, Mechanical Engineering 377K, Spring 2019

Undergraduate Research Supervisions: In Progress

- [1] Pranav Nair, Plan II Honors Thesis

Ph.D. Dissertation Committee Memberships: Completed

- [6] Sam Aminfard, Mechanical Engineering, Fall 2018
[5] William Gurecky, Mechanical Engineering, Fall 2018
[4] Kazunori Nagasawa, Mechanical Engineering, Summer 2018
[3] Thomas Deetjen, Mechanical Engineering, Spring 2018
[2] Scott Vitter, Mechanical Engineering, Spring 2018
[1] Chris Hadlock, Operations Research and Industrial Engineering, Spring 2017

Ph.D. Dissertation Committee Memberships: In Progress

- [6] Andrew Beck, Operations Research and Industrial Engineering
[5] Jia Guo, Operations Research and Industrial Engineering
[4] Samuel Johnson, Mechanical Engineering
[3] Neal Mann, Mechanical Engineering
[2] D. Cale Reeves, Public Policy
[1] Zachary Smith, Operations Research and Industrial Engineering

M.S. Thesis Committee Memberships: Completed

[2] Mark Reid, Energy and Earth Resources, Spring 2019

[1] Dinuk Prathaj Haputhanthri, Energy and Earth Resources, Spring 2017

Personal Information

Citizenship: United States

Birthplace: New York, NY, United States