

Erick C. Jones

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1. Education and Employment History

1.1 Education

- Current Ph.D., Operations Research and Industrial Engineering, University of Texas, Austin, TX
Advisor: Benjamin Leibowicz
Dissertation: Multi-Systems Optimization: Intermittent Production, Flexible Demand, Emerging Technologies
- May 2019 M.S., Operations Research and Industrial Engineering, University of Texas, Austin, TX
Advisor: Benjamin Leibowicz
- May 2014 B.S., Chemical Engineering, Texas A&M University, College Station, TX
Minor: Petroleum Engineering

1.2 Research & Academic Appointments

- 2019- *Fellow*, National Science Foundation: National Research Trainee
- 2020- *Researcher*, Texas Energy Poverty Research Institute, Austin, TX
- 2017- *Graduate Research Assistant*, Operations Research and Industrial Engineering
- 2020 *Fellow*, DOE Mickey Leland Energy Fellowship, Los Alamos National Labs
- 2020 *Visiting Scientist*, NSF COVID-19 Grant, University of Texas at Arlington
- 2020 *CRANE Fellow*, Prime Coalition
- 2018-2019 *Fellow*, National GEM Fellowship Program
- 2018-2019 *Module Developer*, Planet Texas 2050, University of Texas
- 2009-2014 *Undergraduate Research Assistant*, Chemical Engineering, Texas A&M University

1.3 Industry and Non-Profit Positions

- 2015-2017 *Project Engineer*, Johnson Controls, Houston, TX
- 2014-2015 *Process Engineer*, AMEC Foster Wheeler, Houston, TX
- 2012 *Engineer Intern*, HDL Power, Brenham, TX
- 2011 *Engineer Intern*, PWD Group, Queretaro, Mexico

1.4 Teaching Activities

- 2018-2020 *Grader*, Engineer Your World, University of Texas
- 2018-2019 *Teaching Assistant*, Engineering Finance, Mechanical Engineering, University of Texas
- 2018-2019 *Scientist in Residence*, Science in Residence, University of Texas & Austin High School
- 2018 *Teaching Assistant*, Fluids Lab, Mechanical Engineering, University of Texas
- 2017 *Teaching Assistant*, Fluids, Mechanical Engineering, University of Texas

1.5 Professional Development

1.5.1 Conferences

- Stanford Workshop: Macro-Energy Systems, September 17-18th, 2020.
- GEM Conference*, The GEM Foundation, September 10-12th, 2020.
- Mickey Leland Energy Fellowship Program Technical Forum*, August 3-7th, 2020

- Energy Week 2020*, University of Texas at Austin, Austin, TX, February 17-21, 2020
Poster Session: Co-Optimizing Distributed Energy, Water, and Transportation: An Optimization-Based Decomposition Approach
- Graduate and Industry Networking Event*, Austin, TX, February 4th, 2020.
Poster Session: Building a Sustainable Future: Co-Optimizing Community Energy and Water, Transportation and Power
- Texas Energy Summit*, TEES Energy Systems Labs, Austin, TX, November 12-14th, 2019
Poster Session: Building a Sustainable Future: Co-Optimizing Community Energy and Water, Transportation and Power
- GEM Conference*, The GEM Foundation, Los Angeles, California, September 13-15th, 2018.
Poster Session: The Role of SAVs in Climate Change Mitigation
Lecture Session: The Role of SAVs in Climate Change Mitigation
- Graduate and Industry Networking Event*, Austin, TX, February 5th, 2019.
Poster Session: The Role of SAVs in Climate Change Mitigation

1.5.2 Workshops

- WoodWorks Webinar: Modular Wood-Frame for Multi-Family: Design ...*, 2020
- CELC North Texas Roundtable*, 2020
- Renwable Thermal Alliance Webinar*, Renewable Thermal Alliance, 2020
- Sustainable Buildings Austin Climate Action Plan*, Austin, TX, 2020
- AGEP Research Exchange*, Berkeley, California, 2019
- 3 Minute Thesis Competition*, Austin, Texas, 2019

2. Awards, Recognition, and Service

2.1 University Level

- 2017-2020 *Operations Research and Industrial Engineering Grant*, University of Texas
- 2012 *Artie McFarren Department of Chemical Engineering Scholarship*, Texas A&M University
- 2012 *12th Man Kickoff Team Scholarship*, Texas A&M University
- 2011 *Distinguished Student Award for Outstanding Academic Achievement*, Texas A&M University
- 2010 *Dwight Look Engineering College Scholarship*, Texas A&M University
- 2019-2020 *Vice President*, Graduate Engineering Council, University of Texas
- 2019- *Relations Chair*, Institute for Operations Research and Management Sciences, University of Texas
- 2017-2019 *Department Rep & New Programs Chair*, Graduate Engineering Council, University of Texas
- 2010-2014 *Program Chair*, National Society of Black Engineers, Texas A&M University

2.2 National Level

- 2013 *National Science Foundation Louis Stokes Alliance for Minority Participation Scholarship*

2.3 City/Community Level

- 2020 *Committee Member*, City of Austin Sustainable Buildings Taskforce, Austin, Texas
- 2019-2020 *Volunteer*, Urban Roots Farm, Austin, Texas
- 2014-2017 *Volunteer*, United Way, Houston, Texas
- 2016-2017 *Volunteer*, Baker Ripley, Houston, Texas
- 2014-2017 *Volunteer*, Big Brother Big Sister, Houston, Texas

3. Scholarly Accomplishments

3.1 Refereed Journal Articles in Print

1. Jones, E. C., Azeem, Gohar, Jones, Erick C., and Jefferson, F., “Impacting at Risk Communities using AI to optimize the COVID-19 Pandemic Therapeutics Supply Chain”, International Supply Chain Technology Journal (ISCTJ), Vol. 6, No. 9 September 2020. DOI: doi.org/10.20545/isctj.v06.i09.02
2. Erick Jones and Benjamin Leibowicz “*Contributions of Shared Autonomous Vehicles to Climate Change Mitigation*”, Transportation Research Part D: Transport and Environment, v. 72, 2019, pg. 279-298, 1361-9209, DOI: 10.1016/j.trd.2019.05.005.
3. Juan C. Burgos, Erick Jones, and Perla B. Balbuena “*Dynamics of Topological Defects in Single-Walled Carbon Nanotubes during Catalytic Growth*”, The Journal of Physical Chemistry C 2014 118 (9), 4808-4817 DOI: 10.1021/jp412708h
4. Juan C. Burgos, Erick Jones, and Perla B. Balbuena “*Effect of the Metal–Substrate Interaction Strength on the Growth of Single-Walled Carbon Nanotubes*”, The Journal of Physical Chemistry C 2011 115 (15), 7668-7675 DOI: 10.1021/jp200919j

3.2 Refereed Conference Papers in Print

1. Dana Harmon, Erick Jones, Emory Wolfe, and Jacquie Moss “*Pathways for Reducing Energy Burdens in Harris County*”, 2020 ACEEE Summer Study on Energy Efficiency in Buildings proceedings

3.3 Refereed Journal Articles in Review

1. Erick Jones and Benjamin Leibowicz “*Co-optimization and community: Maximizing the benefits of distributed electricity and water technologies*”, Sustainable Cities and Society

3.4 Refereed Conference Papers in Review

1. Erick Jones “*Decomposing Systems: Illustrating the Utility of Distributed Energy Resources with Decomposition Techniques*”, Institute of Industrial and Systems Engineers Annual Conference and Expo 2020

3.5 Works in Progress

1. Erick Jones, Sean Yaw, Richard Middleton, “*Temporal SimCCS 2.0: Adjusting SimCCS with relation to time to account for the 45Q Tax Credits*”
2. Erick Jones, Lina Sela, Ali Fares, Benjamin Leibowicz , “*Multi-Systems Optimization in a Water Constrained Agricultural Setting: Combing Energy, Water, and Food Systems*”
3. Jones, E. C., Azeem, Gohar, Jones, Erick C., and Jefferson, F., “*COVID-19 Medicinal Supply Chain Optimization: Prioritizing Vulnerable Populations based on past Infectious Disease Response*”