TEXAS STATE VITA

Please note: For all entries, list most recent items first. Headings without entries may be eliminated, but the heading lettering/numbering should remain consistent with this template.

I. Academic/Professional Background

A. Name: **Tongdan Jin** Title: Professor

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
Ph.D.	2001	Rutgers University-New Brunswick, NJ	Industrial and Systems Engineering	Complex System Reliability Modeling and Optimization Considering Component Estimation Uncertainty
MS	2001	Rutgers University-New Brunswick, NJ	Electrical and Computer Engineering	Non-Thesis
MS	1994	Beijing Institute of Technology, China	Flight Vehicles Engineering	N/A
BS	1991	Shaanxi University of Science and Technology, China	Electrical and Automation Engineering	N/A

C. University Experience

Position	University	Dates
Program Coordinator of Industrial Engineering	Texas State University, TX	8/2018-8/2022
Professor	Texas State University, TX	9/2020-present
Associate Professor	Texas State University, TX	8/2013-8/2020
Assistant Professor	Texas State University, TX	8/2009-7/2013
Assistant Professor	Texas A&M International University, TX	9/2006-7/2009
Research/Teaching Assistant	Rutgers University, NJ	9/1997-8/2001
University Fellowship	Rutgers University, NJ	9/1996-8/1997
University Fellowship	Ohio State University, OH	9/1995-8/1996
Research Assistant	Tsinghua University, China	9/1994-8/1995

D. Relevant Professional Experience

Position	Entity	Dates
Visiting Professor (faculty development leave)	Lucas Graduate School of Business, San Jose State University, CA	1/2016-7/2016
Visiting Professor (faculty development leave)	School of Electrical Engineering, Zhejiang University, China	7/2015-9/2015
Chunhui Visiting Professor	Shanghai Jiao Tong University, China	6/2007-8/2007
Project/Reliability Engineer	Teradyne Inc., Boston, MA	9/2001-8/2006
Summer Intern	Nabisco Research and Technology Center, East Hanover, NJ	5/1999-8/1999

III. SCHOLARLY/CREATIVE

A. Works in Print

1. Textbooks:

- **Tongdan Jin**, Title "**Reliability Engineering and Services**," John Wiley & Sons, 1st Edition, published in March, 2019, total 560 pages, refer to https://www.wiley.com/en-us/Reliability+Engineering+and+Services-p-9781119167013

3. Articles (Recent 6 years)

a. Selected Refereed Journal Articles (Note "___" are graduate student, and "___" are undergraduate student author"):

[1] MT Kuhel, **T Jin**, "A location-allocation model for interplanetary supply chain design under Operational uncertainty." Space: Science & Technology, vol. 6, 2026, Article ID: 0594, DOI: 10.34133/space.0594.

[2] **T Jin**, A Abedin, "Co-allocation of reliability-redundancy, spare parts and spacecraft trajectory for lunar habitation," Journal of Reliability Science and Engineering, 2025, vol., no. 1, 015005.

[3] F. Sun, **T. Jin, "**Integrating virtual power plants for sustainable supply chain operations in production-climate nexus," Journal of Industrial and Production Engineering, 2024, vol. 41 (8), pp. 716-732

[4] Honglin Li, **Tongdan Jin**, Clara Novoa, "Joint facility and microgrid location-allocation for commodity market and transactive energy integration," Applied Mathematical Modeling, vol. 119, 2023, pp. 119-136.

[1] **Tongdan Jin**, "Bridging reliability and operations management for superior system availability: challenges and opportunities," Frontiers of Engineering Management, vol. 10, 2023, pp. 391-405, https://doi.org/10.1007/s42524-022-0206-4.

[2] Sayed Islam, Clara Novoa, **Tongdan Jin**, "Multi-Facility Aggregate Production Planning with Prosumer Microgrid: A Two-Stage Stochastic Program," Journal of Cleaner Production, vol. 367, 2022, 132911, https://doi.org/10.1016/j.jclepro.2022.132911.

[3] Tongdan Jin, Honglin Li, Siva Prabha, "Supply chain design for transactive energy operations in the nexus of manufacturing, microgrid and climate," Journal of the Operational Research Society, 2022, (in press).

[4] Fei Sun, **Tongdan Jin**, "A hybrid approach to multi-step, short-term wind speed forecasting using correlated features," Renewable Energy, vol. 186, 2022, pp. 742-754.

[5] Jie Zhang, Lihui Bai, **Tongdan Jin**, "Joint planning for battery swap and supercharging networks with priority service queues," International Journal of Production Economics (impact factor 7.34), vol. 233, 2021, https://doi.org/10.1016/j.ijpe.2020.108009 (in print).

[6] Yongjun Du, Shubin Si, Zhiqiang Cai, **Tongdan Jin**, "Bayesian importance measures for network edges under saturated Lagrangian Poisson failures," IEEE Transactions on Reliability, vol. 70, no. 1, 2021, pp. 110-120.

[7] Vinod Subramanyam, **Tongdan Jin**, Clara Novoa, "Sizing a renewable microgrid for flow shop manufacturing using climate analytics," Journal of Cleaner Production, 2020, (in print).

[8] Honggang Wang, **Tongdan Jin**, "Prevention and survivability for power distribution resilience: A multi-criteria renewables expansion model," IEEE Access, 2020, vol. 8, pp. 88422-88433, (available https://ieeexplore.ieee.org/document/9089036, full download 696 as of 1/3/2023)

[9] Jose L.R. Duarte, Neng Fan, **Tongdan Jin**, "Multi-process production scheduling with variable renewable integration and demand response," European Journal of Operational Research, vol. 251, no. 1, 2020, pp. 186-220.
[10] An Pham, **Tongdan Jin**, Clara Novoa, Jin Qin, "A multi-site production and microgrid planning model for net-zero energy operations," International Journal of Production Economics, vol. 218, no. 12, 2019, pp. 260-274.

4. Conference Proceedings (Recent 6 years)

Refereed Conference Proceedings (Note "___" are graduate student, and "___" are undergraduate student author"):
[1] A. Abedin, **T. Jin**, "A multi-criteria optimization for launch vehicle mass and lunar habitation reliability," in Proceedings of IISE Annual Conference, pp. 1-6, Dallas, May, 15-17 2026.
[2] M. Tabir Kuhel, **T. Jin**, E. Z. Fainman, "A trajectory and location-allocation model for cislunar space production and distribution," in Proceedings of IISE Annual Conference, pp. 1-6, Dallas, May, 15-17 2026.
[3] A. Fernandez, W. Dong, **T. Jin**, "Queueing-based strategic planning for electric aircraft battery-swapping and regular and -mega charging infrastructure," in IISE Annual Conference. Proceedings, Monreal, Atlanta, May 30, 2025.
[4] V. Mora Casallas, J. Saha, A. Abbasi, **T. Jin,** M. Londa, "Planning for net-zero electric vehicle charging infrastructure in Texas through 2040," in IISE Annual Conference. Proceedings, pp. 1-6, Monreal, Canada, May 15-17, 2024.
[5] H. Li, **T. Jin**, E. Z. Fainman, "Locating and allocating warehouse facilities and prosumer microgrid in transactive energy paradigm," in Proceedings of International Conference on Smart Electrical Grid and Renewable Energy, Changsha, China, June 15-19, 2023, pp. 410-415.
[6] S. P. Kumar Prabha, **T. Jin**, "Planning resilient virtual power plants for multi-site enterprise systems with thermal cogeneration," in Proceedings of IEEE 2022 International Conference on Cyber-Physical Social Intelligence, Nanjing, China, Nov. 18-21, 2022, total 8 pages.
[7] E. Zhu Fainman, **T. Jin**, K. Ikehata, "A comparative study of machine learning algorithms for long-term daily water usage forecasting," in Proceeding of IISE Conference, Seattle, WA, total 6 pages, 2022.
[8] S. R. Islam, C. Novoa, **T. Jin**, "A two-stage stochastic aggregate production planning model with renewable energy prosumers, in Proceedings of 2021 IIE Annual Conference, pp. 223-228.
[9] M. Saha, **T. Jin**, "Sizing prosumer microgrid and EV battery stock for swapping stations with reliability constraint," in Proceedings of International Conference for QR2MSE, Chengdu, China, Oct 24-27, 2021 (accepted and virtual meeting).
[10] **T. Jin,** V. Subramanyam, K. Castello, F. Sun, "Optimal sizing of renewable microgrid for flow shop systems under island operations," the 30th International Conference on Flexible Automation and Intelligent Manufacturing (FAIM), June 15-18, 2021, Athens, Greece (virtual).
[11] **T. Jin**, H. Lin, F. Sun, "System availability considering redundancy, maintenance and spare parts with dual repair processes," in Proceedings of Institute of Industrial and Systems Engineers (IISE) Conference and Expo, 2021, New Orleans, AL, total 6 pages.
[12] S. Islam, C. Novoa, **T. Jin**, "A two-stage stochastic aggregate production planning model with renewable energy prosumers," in Proceedings of Institute of Industrial and Systems Engineers (IISE) Conference and Expo, 2021, New Orleans, AL, total 6 pages.

[13] **T. Jin**, J. Espiritu, H. Taboada, "Variance of reliability estimate for k-out-of-n systems with cold standby units," in Proceedings of the 9th Asia-Pacific Symposium on Advanced Reliability and Maintenance Modeling, 2020, Vancouver, Canada, 6 pages.

IV. Grants and Contracts

1. Funded External Grants and Contracts (PI=Principal Investigator):

- T. Jin (PI), Sizing Renewable Microgrid for Net-Zero and Resilient Electric Vehicle Charging Stations of Texas through 2040. Sponsor: Electric Power Research Institute, amount: $5,000, from 8/2023 to 5/2024.
- T. Jin (PI), Electric Vehicle Charging Infrastructure Planning for 2040: A Case Study of Texas. Sponsor: Electric Power Research Institute, from 11/2022 to 12/2023.
- T. Jin (PI), "ME-GREEN: Manufacturing for Environment by Generating Renewable Energy in Enterprise Networks," Sponsor: National Science Foundation (NSF), award # 1704933, Co-PI: Dr. Clara Novoa, from 7/2017 to 6/2021 (completed).
- T. Jin (PI), "BGREEN-Building a Regional Energy and Educational Network," sponsor: US Department of Agriculture, award # 2011-38422-30803, from 9/1/2011 to 8/31/2016. This is a four-university consortium involving three other universities: UT-El Paso, Texas A&M University -Kingsville and New Mexico State University.
- T. Jin (PI), "MSEIP: Creating Virtual Teaching Assistants to Improve Math, Engineering, and Physics Curriculums," sponsor: U.S. Department of Education, award # P120A100020, project duration: 9/1/2010-8/31/2013 (completed).
- T. Jin (Co-PI), "MRI: Acquisition of a Low-Field NMR for Research/Education at Texas A&M International University," NSF (#0820919), PI: Dr. Qingwen Ni, Project duration: 9/1/2008-8/31/2011, (completed).

V. SERVICE

A. University/College (TxState=Texas State University):

[1] Member of College Review Group for Tenure and Promotion, 9/2023-present.
[2] Member of Expectation of MSEC PhD Student Productivity Policy Development Committee, 3/2019-5/2020.
[3] Liaison of Ingram School of Engineering to MSEC PhD program. Working with Dr. Jennifer Irvin for the feasibility of expanding MSEC core courses by incorporating engineering curriculums of Ingram School Engineering, 10/2015-5/2016.
[4] Member of Research Enhancement Program Proposal Review Committee, 9/2013-5/2014.
[5] Member of Hispanic Serving Institution Research Day Planning Committee, 9/2012-5/2013.
[1] Member of Curriculum Committee in the Ingram School of Engineering, 3/2010-8/2012.
[2] Member of Industrial Engineering Tuning Committee for Texas Higher Education Coordination Board, 4/2010-5/2011.
[3] Member of the Search Committee for System/Web Services Librarian, Texas A&M International University (TAMIU), 4/2008-10/2008.
[4] Member of the Library Committee at Texas A&M International University, 9/2006-8/2008.

B. Departmental:

[1] Member of the Personnel Committee of Ingram School of Engineering, 9/2013-present.
[2] Regularly participate in Bobcat day and/or graduation commencement, 9/2009-present.
[3] Member of IE assistant professor search committee, 9/2022-present.
[4] Program Coordinator of Industrial Engineering of Ingram School of Engineering (ISoE), 8/2018-8/2022.
[5] Leadership of IE ABET Accreditation Application Team, 9/2018-8/2022.

[6] Chair of IE lecturer position search committee, 9/2021-7/2022.
[7] Chair of the Personnel Committee of Ingram School of Engineering, 8/2020-8/2021.
[8] Member of Workload Policy Development Committee of ISoE, 7/2019-8/2020.
[9] Member of Engineering School Director Search Committee, 6/2019-5/2020.
[10] Member of Department Information Technology Oversight Committee, 9/2017-8/2018.
[11] Chair of IE Faculty Search Committee, 9/2016-5/2017.
[12] Chair of Presidential Upper Level Scholarship Program Committee, 9/2012-5/2015.
[13] Member of IE faculty search committee at Texas State University, 10/2011-5/2012.
[14] Member of Engineering School Curriculum Committee at Texas State, 3/2010-5/2012.
[15] Chair of the Department Colloquium/Student Research Conference at Texas A&M International University, 9/2007-8/2009.
[16] Supervisor of Student Society of Engineering at Texas A&M International University, 9/2006-8/2009.
[17] Member of the Department Graduate Handbook Committee at Texas A&M International University, 6/2008-10/2008.

C. Community:

[1] Participation in Open house for High Tech U students on February 20, 2013
[2] Participation in Open house for Local high school student on-campus visit to Ingram School on February 22, 2013, and on March 26, 2013, respectively.
[3] Academic liaison for Reliability Engineering education and research program sponsored by American Society for Quality, 7/2011-2015.

D. Professional Services and Leadership:

[1] NSF CAREER proposal reviewer and panelist in Chemistry, Bioengineering, Environmental and Transport (CBET) program, 2018 to present.
[2] Associate editor of IEEE Transactions on Reliability, 1/2025-present
[3] Program Committee Member of International Conference on Quality, Reliability, Risk, Maintenance, and Safety Engineering Conference (ICQR2MSE), 2011-2022.
[4] Associate Editor of IISE Transactions on Quality and Reliability Engineering, 2/2017-12/2021.
[5] Guest Editor of IEEE Access on Special Section on Uncertainty Quantification in Robotic Applications, 6/2019-9/2020.
[6] NSF CAREER proposal reviewer in Decision, Risk, and Management Sciences program, 9/2019.
[7] Board of Directors of Society of Quality Control and Reliability Engineering in IISE (Institute of Industrial and Systems Engineers), 2014-2016.
[8] Program Committee Member in the 12th International Conference on Reliability, Maintainability and Safety (ICRMS), Shanghai, China, 1/2018-10/2018.
[9] Serve as best student paper reviewer in Quality Control and Reliability Engineering Division, Industrial and Systems Engineering Research Conference, 2017, 2018.
[10] Session chair for Annual INFORMS, 2011-2018.
[11] Session chair for ISERC conference, 2009-2016.
[12] Member of Management Committee for Reliability and Maintainability Symposium (RAMS) Conference, 2013-2016.
[13] Proposal Reviewer of Bonneville Power Administration (BPA) Technology Innovation, June 2015.
[14] Associate Editor for International Journal of Performability Engineering (4/2011-5/2013).
[15] NSF Proposal Reviewer and Panelist in CMMI Division, June 6, 2012.
[16] Session Co-chair for Quality Reliability Engineering, INFORMS, 2010, Austin, TX.

[17] Conference Committee member of The 8th International Conference on Dependable, Autonomic and Secure Computing (DASC-09), 2009, Chengdu, China.
[18] Session Chair of the International Conference on Reliability, Maintainability, and Safety (ICRMS), Chengdu, China, 2009.
[19] Session Chair of 2009 Conference for International Society of Science and Applied Technologies, San Francisco, CA.
[20] Session Chair of 2007 Conference of Automation Science Engineering, Scottsdale, AZ.
[21] Serve as an ad-hoc peer reviewer for 40+ technical journals/conferences, 2006-present.

E. Organizations
1. Honorary:
- Certificate of serving as the Board of Director in Quality Control and Reliability Engineering Division, Institute of Industrial and Systems Engineer, 5/2016.

VI. Professional Membership:
- Senior Member of IEEE (Institute of Electrical and Electronics Engineers, effective from 1/2020)
- Member of IISE (Institute of Industrial and Systems Engineers)
- Member of INFORMS (Institute for Operations Research and Management Sciences)