

# JINGJING TONG, Ph.D.

## CONTACT INFORMATION

AG/ET Room 220, 2000 University Dr.  
Commerce, TX 75428

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email TBD

## ACADEMIC EXPERIENCE

<b>Assistant Professor of Industrial Engineering</b> Texas A&M University - Commerce	August 2021 – Present Commerce, TX
<b>Associate Professor of Industrial Engineering</b> Southeast Missouri State University	August 2019 – May 2021 Cape Girardeau, MO
<b>Assistant Professor of Industrial Engineering</b> Southeast Missouri State University	August 2014 – July 2019 Cape Girardeau, MO
<b>Doctoral Research Assistant of Industrial Engineering</b> University of Arkansas	August 2010 – July 2014 Fayetteville, AR

## EDUCATION

<b>Ph.D. in Industrial Engineering</b> Dissertation: Disruption Response Support for Inland Waterway Transportation	University of Arkansas	August 2014
<b>M.S. in International Transport</b>	Cardiff University, UK	January 2009
<b>B.Eng. in Transportation Mgt.</b> The curriculum covers industrial engineering courses as well as maritime transportation courses. The degree prepares students to apply industrial engineering concepts and techniques to the transportation field.	Dalian Maritime University, China	July 2007

## RESEARCH INTERESTS

Methodology: mathematical optimization, heuristics, Markov decision process, statistical modeling, machine learning  
Application: maritime and inland waterway transportation, disruption response, preventive healthcare.

## PUBLICATIONS

### **Journal Articles**

1. **Tong, J.** and Varol, S. Adherence to colorectal cancer screening using nationwide unbalanced data. (2020). Under review, *American Journal of Health Behavior*.
2. Rasheduzzaman, M., **Tong, J.**, Fajri, P. and Bawaneh, K., and Deken, B. (2020). Teaching a multidisciplinary energy management course with laboratory experiments in a flipped classroom setup. Accepted to *Journal of Engineering Technology*.
3. **Tong, J.** and Nachtmann, H. (2020). A Tabu search heuristic for cargo prioritization and terminal allocation for inland waterway disruptions. *International Journal of Shipping and Transport Logistics*, 12(3), 147-173.
4. **Tong, J.** and Nachtmann, H. (2017). Cargo prioritization and terminal allocation problem for inland waterway disruptions. *Maritime Economics and Logistics*, 19(3), 403-427.
5. **Tong, J.** and Nachtmann, H. (2015). Value-Focused Assessment of Cargo Value Decreasing Rates. *Engineering Management Journal*, 27(2), 73-84.

6. Nachtmann, H., Collins, T., Chimka, J.R. and **Tong, J.** (2015). Development of a balanced scorecard for flight line maintenance activities. *Journal of Quality in Maintenance Engineering*, 21(4), 436-455.
7. **Tong, J.** and Chimka, J.R. (2012). Statistical process control for the fractal dimension of a time series. *International Journal of Quality Engineering and Technology*, 3(1), 20-30.

### **Refereed Proceedings**

8. **Tong, J.** and Nachtmann, H. (2016). Economic analysis of disruptions on the Mississippi river: an engineering economy educational case study. *Proceedings of the 2016 American Society for Engineering Education Annual Conference*.
9. Delgado, L., Nachtmann, H. and **Tong, J.** (2015). Analytic hierarchy approach to inland waterway cargo prioritization and terminal allocation. *Proceedings of the American Society for Engineering Management 2015 International Annual Conference*.
10. **Tong, J.**, Nachtmann, H. and Pohl, E.A. (2013). Value-focused thinking for inland waterborne cargo prioritization. *Proceedings of the American Society for Engineering Management 2013 International Annual Conference (One of the Six Finalists out of 73 Papers for Best Paper Award)*.
11. **Tong, J.** and Nachtmann, H. (2013). Multi-attribute decision model for cargo prioritization within inland waterway transportation. *Proceedings of the 2013 Industrial Engineering Research Conference*.
12. **Tong, J.** and Nachtmann, H. (2012). A review of cargo prioritization techniques within inland waterway transportation. *Proceedings of the 2012 Industrial Engineering Research Conference (Invited paper)*.
13. **Tong, J.** and Nachtmann, H. (2011). A review of risk assessment models for inland waterway transportation. *Proceedings of the 2011 Industrial Engineering Research Conference (Homeland Security Track Best Paper Award)*.

## **PRESENTATIONS and POSTERS**

### **Invited Presentation**

1. **Tong, J.** (2018). Industrial & Systems Engineering/Industrial Distribution. *Missouri Society of Professional Engineers Quarterly Meeting*.
2. **Tong, J.** and Han, X. (2016). Why Industrial Engineering is important in transportation and healthcare? *Engineering Week Keynote Presentation, Southeast Missouri State University*.
3. **Tong, J.** (2016). Value-focused assessment of cargo value decreasing rates. *Provost's Research & Creativity Showcase, Southeast Missouri State University*.

### **Conference Presentations**

4. **Tong, J.** (speaker) and Nachtmann, H. (2019). Inland waterway disruption response under uncertain conditions. *2019 INFORMS Annual Conference*.
5. **Tong, J.** (speaker), Nachtmann, H., Chimka, J. and Boudhoum, S. (2018). Inland waterway disruption response under uncertain conditions. *2018 American Society of Engineering Management Annual Conference*.

6. **Tong, J.** (speaker), Nachtmann, H., Chimka, J. and Boudhoum, S. (2018). Inland waterway disruption response under uncertain conditions. *2018 Institute of Industrial & Systems Engineers Annual Conference and Expo.*
7. **Tong, J.** (speaker), Zhang, S. and Nachtmann, H. (2017). A Finite-horizon MDP model for decision making during the inland waterway disruptions. *2017 American Society of Engineering Management Annual Conference.*
8. **Tong, J.** (speaker), Chimka, J.R. and Nachtmann, H. (2016). Economic impact of inter-modal rail-road transport according to a multiple linear regression model of transportation industry GDP. *2016 American Society of Engineering Management Annual Conference.*
9. **Tong, J.** (speaker) and Nachtmann, H. (2016). Value-focused assessment of cargo value decreasing rates. *2016 Institute of Industrial & Systems Engineers Annual Conference and Expo.*
10. **Tong, J.** (speaker) and Nachtmann, H. (2015). Heuristic comparison for the cargo prioritization and terminal allocation problem. *2015 Institute of Industrial & Systems Engineers Annual Conference and Expo.*
11. **Tong, J.** (speaker) and Nachtmann, H. (2015). Value-focused assessment of cargo value decreasing rates. *2015 American Society of Engineering Management Annual Conference.*
12. Delgado, L. (speaker), Nachtmann, H. and **Tong, J.** (2015). Analytic hierarchy approach to inland waterway cargo prioritization and terminal allocation. *2015 American Society of Engineering Management Annual Conference.*
13. **Tong, J.** (speaker), Nachtmann, H., Chimka, J.R. and Pohl, E.A. (2013). A cargo prioritization model for inland waterway disruptions. *2013 INFORMS Annual Meeting.*
14. **Tong, J.** (speaker), Nachtmann, H. and Pohl, E.A. (2013). Value-focused thinking for inland waterborne cargo prioritization. *ASEM 2013 International Annual Conference.*
15. **Tong, J.** (speaker) and Nachtmann, H. (2013). Multi-attribute decision model for cargo prioritization within inland waterway transportation. *2013 Institute of Industrial Engineers Annual Conference and Expo.*
16. **Tong, J.** (speaker), Nachtmann, H., Chimka, J.R. and Pohl, E.A. (2012). A cargo prioritization model for inland waterway disruptions. *2012 INFORMS Annual Meeting.*
17. **Tong, J.** (speaker) and Nachtmann, H. (2012). A review of cargo prioritization techniques within inland waterway transportation. *2012 Institute of Industrial Engineers Annual Conference and Expo.*
18. **Tong, J.** (speaker) and Chimka, J.R. (2011). Statistical process control for the fractal dimension of a time series. *2011 INFORMS Annual Meeting.*
19. **Tong, J.** (speaker) and Nachtmann, H. (2011). Cargo prioritization for inland waterway disruptions. *2011 INFORMS Annual Meeting.*
20. **Tong, J.** (speaker) and Nachtmann, H. (2011). A review of risk assessment models for inland waterway transportation. *2011 Institute of Industrial Engineers Annual Conference and Expo.*

## Posters

1. **Tong, J.** (speaker) and Nachtmann, H. (2013). Waterborne cargo prioritization during disruption. *Doctoral Colloquium Poster Session, 2013 Institute of Industrial Engineers Annual Conference and Expo.*

2. **Tong, J.** (speaker) and Nachtmann, H. (2013). Prioritizing waterborne cargo in the event of a catastrophic disaster. *Graduate Research Opportunities Forum, University of Arkansas.*
3. **Tong, J.** (speaker) and Nachtmann, H. (2013). Prioritizing waterborne cargo in the event of a catastrophic disaster. *2013 Graduate Student Research and Creative Expression Competition, University of Arkansas.*
4. Nachtmann, H., Chimka, J.R., Pohl, E.A. and **Tong, J.** (speaker) (2012). Supporting secure and resilient inland waterways. *2012 Mack-Blackwell Rural Transportation Center (MBTC) Jack Buffington Student Poster Session.*
5. **Tong, J.** (speaker) and Nachtmann, H. (2012). Supporting secure and resilient inland waterways. *Award Winning Poster Presentation at 2012 Dean's Advisory Council Meeting, College of Engineering, University of Arkansas.*
6. **Tong, J.** (speaker) and Nachtmann, H. (2012). Supporting secure and resilient inland waterways. *2012 Graduate Student Research Competition, University of Arkansas.*
7. Nachtmann, H., Chimka, J.R., Pohl, E.A., Pohl, L.M., **Tong, J.** (speaker) and Black, R. (2011). Supporting secure and resilient inland waterways. *2011 Mack-Blackwell Rural Transportation Center (MBTC) Jack Buffington Student Poster Session.*
8. **Tong, J.** (speaker), Nachtmann, H., Chimka, J.R., Pohl, E.A. and Pohl, L.M. (2010). Supporting secure and resilient inland waterways. *2010 Mack-Blackwell Rural Transportation Center (MBTC) Jack Buffington Student Poster Session.*

## **RESEARCH FUNDING**

1. Maritime Transportation Research and Education Center, U.S. Department of Transportation, \$12,793  
*Economic Competitiveness through Waterborne Freight*  
June 2015 - August 2015
2. Summer Research Grant, Southeast Missouri State University, \$5,000  
*A MDP Model to Support Decision Making for Inland Waterway Disruptions*  
May 2015 - August 2015
3. Maritime Transportation Research and Education Center, U.S. Department of Transportation, \$17,971  
*Inland Waterway Disruption Response under Uncertain Conditions*  
January 2018 - August 2018
4. Grants and Research Funding, Southeast Missouri State University, \$800  
*Economic Impacts of Increasing Intermodal Transport in the U.S.*  
January 2018 - December 2018

## **HONORS and AWARDS**

### **Awards**

- |      |   |
|------|---|
| 2015 | First Runner Up of Engineering Management Dissertation Award, American Society for Engineering Management                                 |
| 2013 | Best Paper Award Finalist, American Society for Engineering Management 2013 International Annual Conference                               |
| 2013 | Supply Chain and Logistics Track First Place Award, Graduate Student Research and Creative Expression Competition, University of Arkansas |

- 2012 Supply Chain Track Second Place Award, Graduate Student Research Competition, University of Arkansas
- 2011 Graduate Research Award, Department of Industrial Engineering, University of Arkansas
- 2011 Homeland Security Track Best Paper Award, Institute of Industrial Engineers Annual Conference
- 2009 Outstanding Volunteer Award, Davos World Economic Forum
- 2007 Outstanding University Graduates, Dalian Education Bureau (2% of the approx. 90,000 students who graduated from 4-year institutions in Dalian)

### **Fellowships and Scholarships**

- 2013 Gilbreth Memorial Fellowship, Institute of Industrial Engineers (chosen among national pool)
- 2012 Eric Malstrom Endowed Memorial Scholarship, Department of Industrial Engineering, University of Arkansas (sole graduate winner)
- 2012 Gilbreth Memorial Fellowship, Institute of Industrial Engineers (chosen among national pool)
- 2012 Doctoral Student Travel Grant, Graduate School, University of Arkansas
- 2006 First-level Fellowship, Dalian Maritime University (2% of the students)

### **TEACHING EXPERIENCE**

Department of Engineering & Technology, Southeast Missouri State University

#### **Undergraduate Courses**

- MN220 Engineering Economic Analysis (face-to-face and online)
- EG201 Introduction to Systems Engineering (face-to-face)
- IM311 Statistical Process Control (face-to-face and online)
- IM411 Total Quality Assurance (face-to-face)
- EG506 Operations Research (online)

#### **Mixed Undergraduate & Graduate Course**

- IM506 Project Management (face-to-face and online)

#### **Graduate Courses**

- IM605 Innovation for a Lean Enterprise (face-to-face, blended and online)
- IM691 Methods of Research in Technology Management (face-to-face and online)

Department of Industrial Engineering, University of Arkansas

#### **Undergraduate Course**

- INEG2413 Engineering Economic Analysis (face-to-face)

### **PROFESSIONAL MEMBERSHIPS**

- Institute of Industrial & Systems Engineers (IISE)
- American Society for Engineering Management (ASEM)
- Institute for Operations Research and the Management Sciences (INFORMS)

### **PROFESSIONAL DEVELOPMENT**

- Lean Six Sigma Green Belt Certificate, *Institute of Industrial & Systems Engineers* 2020
- How to Prepare a Grant Proposal Budget Workshop, *Southeast Missouri State University* 2019
- Master Advisor Workshop, *Southeast Missouri State University* 2017

Multiple Take-away Friday Workshops, <i>Southeast Missouri State University</i>	2015-2016
NSF CAREER Proposal Writing Workshop, <i>Northeastern University</i>	2015
New Faculty Colloquium, <i>Institute of Industrial Engineers</i>	2015
Quality Matters Cohort for Online Courses, <i>Southeast Missouri State University</i>	2015
Camtasia Workshop, <i>Southeast Missouri State University</i>	2015
Future Academician Colloquium, <i>INFORMS</i>	2013
Doctoral Colloquium, <i>Institute of Industrial Engineers</i>	2013
Summer Career Development Series, <i>University of Arkansas</i>	2013

### **EXTERNAL SERVICE**

Associate Editor, <i>Engineering Management Journal</i>	2021 – Present
Editorial Board Member, <i>Journal of Business Analytics</i>	2019 – Present
Member, <i>University of Arkansas Early Career Advisory Council</i>	2019
Session Chair, Operations and Supply Chain Management VII , <i>ASEM Annual Conference</i>	2017
Session Chair, Operations and Supply Chain Management VII , <i>ASEM Annual Conference</i>	2015
Session Chair, Maritime Security and Resilience, <i>IIE Annual Conference and Expo</i>	2015
Session Chair, Operations and Supply Chain Management I, <i>ASEM Annual Conference</i>	2013

### **INSTITUTIONAL SERVICE**

<b>Department of Engineering &amp; Technology, Southeast Missouri State University</b>	
Faculty Member, <i>Academic Council</i>	2018 – 2021
Library Liaison, <i>Department of Engineering &amp; Technology</i>	2015 – 2021
Member, <i>Kent Library Tenure &amp; Promotion Advisory Committee</i>	2020 – 2021
Faculty Member, <i>Dean of Graduate School Search Committee</i>	2019 – 2020
Member, <i>Faculty Senate</i>	2016 – 2019
Member, <i>Funding for Results (FFR) Committee</i>	2015 – 2018
Member, <i>College Scholarships Committee</i>	2015 – 2018
Member, <i>Industrial Management Search Committee</i>	2016 – 2017
Member, <i>Electrical Engineering Search Committee</i>	2015 – 2016
Member, <i>Faculty Senate Alternate</i>	2015 – 2016
Faculty Participant, <i>Industrial and Systems Engineering Program Development</i>	2014 – 2017
Faculty Participant, <i>Industrial Distribution Program Development</i>	2014 – 2016
Member, <i>Departmental Graduate Committee</i>	2014 – 2021
Member, <i>Departmental Accreditation Committee</i>	2018 – 2021
Member, <i>Departmental Recruitment Committee</i>	2017 – 2018
Member, <i>Departmental International Students Success Committee</i>	2014 – 2017
Grader for Mathcounts, <i>National Society of Professional Engineers</i>	2016
Judge, <i>First Tech Challenge Qualifier</i>	2016
Robot Design Judge, <i>First Lego League</i>	2014 – 2016
Faculty Leader, <i>Southeast 101 - Freshman Orientation</i>	2015
Judge, <i>Southeast Missouri Regional Science Fair</i>	2015

### **INDUSTRIAL EXPERIENCE**

<b>Research Assistant</b>	February 2009 – March 2010
Dalian Newrand Logistics Research and Development Center	Dalian, China
Responsible for conducting research on logistics and shipping industry, processing documents related to freight transport, and assisting in the cooperation between local and foreign logistics companies	

## **SOFTWARE SKILLS**

Optimization: AMPL, Gurobi, Nitro

Simulation: Arena

Statistical Package: Minitab, SPSS

Language: Matlab, C, C++, Python, Mathematica, Octave

High Performance Computing: Clusters at Arkansas HPC Center

Document Preparation: LaTeX

*Last Modified: August, 2021*