# Zihan Zhang (She/Her)

H. Milton Stewart School of Industrial and Systems Engineering Georgia Institute of Technology, Atlanta, GA, USA

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# **Education**

## **Georgia Institute of Technology**

Atlanta, USA

Ph.D. Candidate, Industrial Engineering (Minor: Machine Learning)

2021-Present

Advisors: Dr. Jianjun (Jan) Shi & Dr. Kamran Paynabar

2022-2024

M.Sc., Computational Science and Engineering University of Toronto

Toronto, Canada

M.A.Sc., Mechanical and Industrial Engineering

, 2019–2021

**Beihang University** 

Beijing, China

B.Eng., Safety Engineering

2015–2019

# **Honors & Awards**

# Paper Award

IISE DAIS Case Study Competition (Winner), 2024

Data Analytics and Information Systems (DAIS) Division, Institute of Industrial and Systems Engineers (IISE)

ASA SPES + Q&P Student Paper Competition (Winner), 2024

Physical and Engineering Sciences (SPES) and Quality & Productivity (Q&P) Sections, American Statistical Association (ASA)

INFORMS ORMS Tomorrow Mini-Poster Competition (Honorable Mention), 2023

Institute for Operations Research and the Management Sciences (INFORMS)

ASA SPES + Q&P Student Paper Competition (Finalist), 2023

Physical and Engineering Sciences (SPES) and Quality & Productivity (Q&P) Sections, American Statistical Association (ASA)

INFORMS QSR Section Best Student Paper Award (Winner), 2022

Quality, Statistics, and Reliability (QSR) Section, Institute for Operations Research and the Management Sciences (INFORMS)

- $\circ$  Selected from over 30 high-quality submissions.
- $\circ$  Received during the  $2^{nd}$  year of my Ph.D. and as a new INFORMS member.

# Funding Panel

NSF CMMI Panel Fellow, 2024

Game Changer Academies for Advancing Research Innovation, Division of Civil, Mechanical and Manufacturing Innovation (CMMI), National Science Foundation (NSF)

# Fellowship & Scholarship

 $\textbf{\textit{Gilbert F. "Gil" Amelio Engineering Fellowship (\$5,000), 2025}$ 

College of Engineering, Georgia Institute of Technology

O Chosen as the only school-nominated recipient among 193 Ph.D. students.

### Mary G. and Joseph Natrella Scholarship (\$3,500), 2025

American Statistical Association (ASA)

- O Recognized for excellence in applying statistical methods to quality improvement and productivity research.
- Awarded annually to two recipients worldwide.

### John L. Imhoff Scholarship (\$2,000), 2025

*Institute of Industrial and Systems Engineers (IISE)* 

- o Recognized for noteworthy contributions to advancing the industrial engineering profession through international engagement and achievement in academic, employment, or professional activities.
- Awarded annually to one recipient worldwide.

## Novelis Graduate Scholarship (\$8,000), 2025

Novelis Innovation Hub at Georgia Tech

O Recognized as one of eight award recipients university-wide.

### Bonder Scholar Grant (\$430), 2024

Institute for Operations Research and the Management Sciences (INFORMS)

o Recognized as one of five award recipients among all INFORMS Student Members.

### DS Student Scholarship, 2024

INFORMS Workshop on Data Science, Institute for Operations Research and the Management Sciences (INFORMS)

### George Fellowship (\$5,000), 2024

George Family Foundation

O Honored as a George Fellow for leadership in advancing healthcare systems.

## Richard A. Freund International Scholarship (\$5,000), 2024

*American Society for Quality (ASQ)* 

- Awarded for excellence in graduate studies focused on the theory and application of quality control, assurance, improvement, and total quality management.
- Awarded annually to one recipient worldwide.

# John S.W. Fargher Scholarship (\$1,000), 2024

*Institute of Industrial and Systems Engineers (IISE)* 

- Awarded for academic excellence in industrial engineering or engineering management.
- O Awarded annually to one recipient from the U.S. or its territories.

#### Huston Scholarship (\$3,000), 2023

*International Society of Automation (ISA)* 

#### Aerospace and Test Measurement Division Scholarship (\$2,000), 2023

*International Society of Automation (ISA)* 

#### Gilbreth Memorial Scholarship (\$3,500), 2023

*Institute of Industrial and Systems Engineers (IISE)* 

O Awarded annually as one of four recipients from the U.S. and its territories, Canada, or Mexico.

#### *Career Development Fund* (\$400), 2022, 2023

Georgia Institute of Technology

#### Richard Iannacone ISyE Fellowship (\$9,000), 2021, 2022

H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

Stewart Topper Fellowship (\$5,000), 2021, 2022

- H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology
  - $\circ$  Provided as additional support for a select group of incoming Ph.D. students.

# Metcalfe Family Graduate Fellowship for Sustainable Energy Research (\$5,500), 2021 Centre for Global Engineering, University of Toronto

# Bert Wasmund Graduate Fellowship in Sustainable Energy Research (\$1,150), 2021

Department of Mechanical and Industrial Engineering, University of Toronto

# Faculty of Applied Science and Engineering Endowed Fellowship (\$2,000), 2020

Department of Mechanical and Industrial Engineering, University of Toronto

*University of Toronto Fellowship* (\$35,376), 2019, 2020, 2021

University of Toronto

National Scholarship, 2018

# Teaching

## Tech to Teaching Certificate, 2023

Center for Teaching and Learning, Georgia Institute of Technology

# Center for the Integration of Research, Teaching, and Learning Associate Level Certificate, 2022

Center for Teaching and Learning, Georgia Institute of Technology

# Advanced University Teaching Preparation Certificate, 2021

Center for Teaching Support & Innovation, University of Toronto

## Teaching Fundamentals Certificate, 2019

Center for Teaching Support & Innovation, University of Toronto

# Leadership

# Phillip J. and Delores A. Scott Graduate Student Health and Wellness Award, 2024, 2025

H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

- Awarded for organizing activities and advocating for student physical and mental health, as well as engaging in challenging physical activities to promote mental well-being.
- o Received twice, for the 2023–2024 and 2024–2025 academic years.

### STARS AI Scholar, 2024

STARS AI Scholars Program supported by STARS Computing Corps, INVITE AI Institute, and EngageAI Institute

#### INFORMS Judith Liebman Award, 2024

*Institute for Operations Research and the Management Sciences (INFORMS)* 

- Recognized for outstanding student volunteerism and leadership as a "moving spirit" within the university, student chapter, and the institute.
- O Honored as the first female student recipient of this award in the history of the institution.

#### INFORMS Student Chapter Annual Award – Summa Cum Laude, 2024

*Institute for Operations Research and the Management Sciences (INFORMS)* 

- Presented to the INFORMS Georgia Tech Student Chapter for exceptional performance during the 2023–2024 academic year.
- Served as Chapter President during this period.

## Graduate Leadership Development Fellow, 2024

Women in Engineering, Georgia Institute of Technology

# Professional Development

## Future Faculty Career Exploration Program, 2025

Rochester Institute of Technology

### IISE Doctoral Colloquium, 2025

Institute of Industrial and Systems Engineers (IISE)

 Nominated by the H. Milton Stewart School of Industrial and Systems Engineering at the Georgia Institute of Technology.

### Rising Stars in Computational and Data Sciences Workshop, 2025

UT Austin's Oden Institute for Computational Engineering and Sciences, Los Alamos, Lawrence Livermore, and Sandia National Laboratories

### Tandon Faculty First Look Fellowship Program, 2025

Tandon School of Engineering, New York University

# IISE Future Faculty Fellow Program, 2024

*Institute of Industrial and Systems Engineers (IISE)* 

### INFORMS Doctoral Student Colloquium, 2024

Institute for Operations Research and the Management Sciences (INFORMS)

O Received the Bonder Scholar Grant from INFORMS to attend.

### New England Future Faculty Workshop, 2024

Northeastern University, Harvard Medical School, Boston University, and Bay Path University

## INFORMS To My Younger Self (TMYS) Program, 2024

*Institute for Operations Research and the Management Sciences (INFORMS)* 

## Operations Research and Information Engineering (ORIE) Young Researchers Workshop, 2023 Cornell University

#### Travel Awards

#### **ASA Travel Grant** (\$500), 2025

Quality and Productivity (QP) Section, American Statistical Association (ASA)

#### Do-Bui International Travel Award (\$500), 2024

Caucus for Women in Statistics and Data Science (CWS), American Statistical Association (ASA)

- Recognized for outstanding contributions to the mission of CWS and the broader statistical community through research, teaching, consulting, and service, as well as for efforts to enhance visibility and advance the research agenda of early career statisticians.
- OPresented annually to two female scholars worldwide.

#### **SPES Student Award** (\$500), 2024

Physical and Engineering Sciences (SPES) Section, American Statistical Association (ASA)

#### SIAM Student Travel Award (\$650), 2024

Society for Industrial and Applied Mathematics (SIAM)

#### **SGA-CoE** Conference Fund (\$2,000), 2022, 2023, 2024, 2025

Student Government Association (SGA) & College of Engineering (CoE), Georgia Institute of Technology

#### ISyE Third-year Progress Travel Award (\$2,000), 2023

H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

## ISyE First-year Fellows Travel Award (\$1,000), 2021

H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

### SGS Conference Grant, 2021

**University of Toronto** 

### **Others**

Beijing Outstanding Graduate, 2019

- o Awarded to the top 5% of undergraduate graduates across universities in Beijing.
- 1<sup>st</sup> Prize (Beijing) Mechanical Innovation and Design Competition, 2017
  - O Received a 1st Prize among 204 teams from 24 universities in Beijing.
- 1<sup>st</sup> Prize (Beijing) Mathematical Modelling Contest, 2017
  - Sole 1<sup>st</sup> Prize recipient from the department.
- 3<sup>rd</sup> Prize National Undergraduate Mathematical Contest, 2016

# **Publications**

Citations: 375 (**Google Scholar**, as of May 17, 2025)

† Co-first author

# Journal (Peer-Reviewed)

[J10]: **Zihan Zhang**, Kamran Paynabar, Jianjun Shi. Tensor-based Feedback Control for Local Structured High-dimensional Streaming Data under Limited Control Capability, *IISE Transactions*, Published.

- OHere is a short presentation about the work.
- 2024 ASA SPES + Q&P Student Paper Competition (Winner)
- 2023 INFORMS ORMS Tomorrow Mini-poster Competition (Honorable Mention)

[J9]: Hairong Wang<sup>†</sup>, Lingchao Mao<sup>†</sup>, **Zihan Zhang**, Jing Li. SmoothSegNet: A Global-Local Framework for Liver Tumor Segmentation with Clinical Knowledge-Informed Label Smoothing, *IISE Transactions on Healthcare Systems Engineering*, Accepted.

- 2024 IISE DAIS Case Study Competition (Winner)
- [J8]: **Zihan Zhang**, Shancong Mou, Kamran Paynabar, Jianjun Shi. Temporal Control for Partially Observed High-Dimensional Streaming Data, *Technometrics*, 2024, 66(2): 227-239.
  - Here is **a short presentation** about the work.
  - 02022 INFORMS QSR Section Best Student Paper Award (Winner)
  - ○2023 ASA SPES + Q&P Student Paper Competition (Finalist)

[J7]: **Zihan Zhang**, Alina Gorbunova, Keunho Rhew, Jianjun Shi. A Review of Prognostics Methods for Packaged Electronics: From a Structure-Aware System-Level Perspective, *IEEE Transactions on Reliability*, Published.

[J6]: **Zihan Zhang**, Shancong Mou, Mostafa Reisi-Gahrooei, Massimo Pacella, Jianjun Shi. Federated Multiple Tensor-on-Tensor Regression (FedMTOT) under Data-Sharing Constraints, *Technometrics*, 2024, 66(4), 548–560.

OHere is a short presentation about the work.

[J5]: **Zihan Zhang**, Yeonjeong Jeon, Jongseong Jang, Chi-Guhn Lee. A Pattern-Driven Stochastic Degradation Model for the Prediction of Remaining Useful Life of Rechargeable Batteries, *IEEE Transactions on Industrial Informatics*, 2022, 18(12): 8586-8594.

- [J4]: **Zihan Zhang**, Li Yang. Postponed Maintenance Scheduling Integrating State Variation and Environmental Impact, *Reliability Engineering and System Safety*, 2020, 202: 107065.
- [J3]: **Zihan Zhang**, Li Yang. State-Based Opportunistic Maintenance with Multi-Functional Maintenance Windows, *IEEE Transactions on Reliability*, 2021, 70(4): 1481-1494.
- [J2]: Li Yang, Gaoyang Li, **Zihan Zhang**, Xiaobing Ma, Yu Zhao. Operations & Maintenance Management of Wind Turbines Integrating Wind and Aging Information, *IEEE Transactions on Sustainable Energy*, 2021, 12(1): 211–221.
- [J1]: Tianyi Wu, Li Yang, Xiaobing Ma, **Zihan Zhang**, Yu Zhao. Dynamic Maintenance Strategy with Iteratively Updated Grouping Information, *Reliability Engineering and System Safety*, 2020, 197: 106820.

# Conference (Peer-Reviewed)

[C2]: **Zihan Zhang**, Chi-Guhn Lee. A Novel Pattern-driven Stochastic Process for End-of-Life Forecasting, 11<sup>th</sup> IMA International Conference on Modelling in Industrial Maintenance and Reliability, Jun 2021.

[C1]: Fuchun Ren, Jian Jiao, **Zihan Zhang**, Tingdi Zhao. A Resilience Engineering-Based Analysis Framework for Network Systems, *International Conference on Applied Mathematics, Modeling and Simulation*, Dec 2017.

# **Grants & Funding**

# Reliability and Prognostics Study for Thermal-Mechanical Failures of Memory Product

Significant Contributor, Feb 24-Feb 25

Sponsor: Samsung Electronics

Amount: \$150,000PI: Dr. Jianjun Shi

o Involvement: Led the proposal writing and served as a project leader, managing finite element analysis simulations, methodology development, biweekly stakeholder meetings, and preparation of monthly, midterm, and annual reports. Delivered outcomes seamlessly integrated into downstream workflows and developed two research papers.

# Sustaining Momentum: INFORMS K-12 Education Outreach and Networking Program Co-PI, Jan 25-Dec 25

- o Sponsor: Institute for Operations Research and the Management Sciences (INFORMS)
- o Amount: \$3,000
- Collaborators: Kenneth Murphy (University of California, Irvine) & Fenglian Pan (University of Arizona) & Yifeng Wang (Georgia Institute of Technology)
- o Involvement: Co-chaired the committee; led proposal development and project execution; organized the event and streamlined operations.

# **INFORMS K-12 Education Outreach and Networking Program**

*Co-PI, Jan 24-Dec 24* 

- ${\tt o}\ Sponsor:\ Institute\ for\ Operations\ Research\ and\ the\ Management\ Sciences\ (INFORMS)$
- o Amount: \$4,968
- o Collaborators: Neil Desnoyers (Saint Joseph's University) & Fenglian Pan (University of Arizona)

o Involvement: Initiated the program; co-chaired the committee; led proposal development and project execution; organized the event and streamlined operations.

# **Research Experience**

# H. Milton Stewart School of Industrial and Systems Engineering, Georgia Tech Graduate Research Assistant, Aug 21-Present

- o **National Science Foundation (NSF)**: EAGER: Real-D: Integrating Data-Driven Methods and Engineering Models in Manufacturing Systems
- o Ford Motor Company: Active Learning for Automated Warranty Claim Binning
- Samsung Electronics: Reliability and Prognostics Study for Thermal-Mechanical Failures of Memory Product

# Centre for Maintenance Optimization and Reliability Engineering, University of Toronto Graduate Research Assistant, Sept 19-Aug 21

- Natural Sciences and Engineering Research Council of Canada (NSERC): Data-Driven Condition-Based Maintenance Models
- o LG Electronics Canada: Transfer Learning for Continual Learning in Non-Stationary Environments

# **Teaching Experience**

# Independent Course Instructor

# ISyE 3039: Methods for Quality Improvement

**Georgia Institute of Technology** 

Undergraduate Level

Sum 25

- o Class Size: TBD.
- o Duties: Designed syllabus, lecture slides, assignments, and exams; delivered all lectures and was fully responsible for course instruction and management.

# Guest Lecturer

# **ISyE 7204: Informatics in Production & Service Systems** *Graduate Level*

Georgia Institute of Technology

Spr 24, 25

- o Main Instructor: Dr. Jianjun Shi.
- O Class Size: Approximately 10 students or more.
- o Duties: Delivered a **self-designed** module titled "*Tensor-based Prognostics and Process Control with Applications in Semiconductor Manufacturing*," including 8 lectures with slides, assignments, code, and a simulation demo.

# ISyE 3039: Methods for Quality Improvement

Georgia Institute of Technology

*Undergraduate Level* 

Fal 23, 24

- o Main Instructor: Dr. Jianjun Shi.
- O Class Size: Approximately 40 students or more.
- o Duties: Delivered modules on "Design of Experiments" and "Minitab," and conducted review sessions.

# Teaching Assistant

# ISyE 8803: Topics on High-Dimensional Data Analytics

Georgia Institute of Technology

Graduate Level

Spr 24; Fal 23; Sum 23

O Instructor: Dr. Kamran Paynabar.

- O Class Size: Approximately 100 students or more.
- o Duties: Held office hours, contributed to assignment and exam development, and managed grading.

## **ISyE 3039: Methods for Quality Improvement**

Georgia Institute of Technology

Undergraduate Level

Fal 21, 22, 23, 24; Spr 22

- o Instructor: Dr. Jianjun Shi.
- O Class Size: Approximately 40 students or more.
- o Duties: Conducted office hours, graded assignments and exams, led review sessions, and taught Minitab tutorials.

## MIE 263: Stochastic Operations Research

**University of Toronto** 

Undergraduate Level

Win 21

- o Instructor: Dr. Janet Lam.
- O Class Size: 118 students.
- O Duties: Led weekly tutorials, developed assignments, and graded submissions.

#### MIE 1615: Markov Decision Processes

**University of Toronto** 

Ph.D. Level Win 21

- o Instructor: Dr. Chi-Guhn Lee.
- O Class Size: 8 students.
- o Duties: Designed assignments and exams, evaluated presentations, and managed grading.

## **MIE 1723: Engineering Asset Management**

**University of Toronto** 

Graduate Level Fal 20

- o Instructors: Dr. Andrew Jardine & Dr. Sharareh Taghipour.
- O Class Size: 40 students.
- o Duties: Delivered exam tutorials, created and graded exams/quizzes, and provided online instructional support.

#### SCS 3531: Physical Asset Management

**University of Toronto** 

Professional Program

Fal 20

- O Instructor: Dr. Andrew Jardine.
- O Class Size: 15 students.
- Duties: Managed the program schedule and supported online instructional delivery.

# **Mentoring Experience**

# Graduate Students Mr. Dhavalkumar Patel

**University of Toronto** 

Industrial Engineering

2021

o Topic: Physics-informed machine learning for lifetime analysis

# Undergraduate Students

**Georgia Institute of Technology** 

Mechanical Engineering

Mr. Joshua Do

2025

O Topic: Finite element analysis-assisted lifetime prediction

Ms. Yi Tong

## Georgia Institute of Technology

Industrial Engineering

O Topic: Tensor-based automatic process control

Ms. Jin Gong

Industrial Engineering

**University of Toronto** 

2020

2023

- O Topic: Data-driven prognostics for rechargeable batteries
- o Award: Mitacs Research Training Award

# **Service**

#### Professional Service

## Adhoc Journal & Conference Reviewer

- o IISE Transactions
- o IEEE Transactions on Automation Science and Engineering
- o IEEE Transactions on Neural Networks and Learning Systems
- o IEEE Transactions on Industrial Electronics
- o IEEE Transactions on Reliability
- ASME Journal of Manufacturing Science and Engineering
- ASME Journal of Computing and Information Science in Engineering
- ASME Open Journal of Engineering
- Journal of Intelligent Manufacturing
- Reliability Engineering and System Safety
- IISE Annual Conference
- o INFORMS Workshop on Data Science
- North American Manufacturing Research Conference
- DSI Annual Conference
- o Vision-based Industrial Inspection (VISION) Workshop @ CVPR, ECCV
- o International Conference on Mechanical, Electric and Industrial Engineering

#### **Board Member**

- o Vice-chair, INFORMS Education Outreach Committee (2024-Present)
- Co-chair, INFORMS Education Outreach Committee K-12 Subcommittee (2022-Present)
  - o Initiated INFORMS K-12 Education Outreach and Networking Program.
  - O Initiated STEM Spark: INFORMS K-12 Poster Competition.
  - o Initiated and led the K-12 Outreach Panel Series at the INFORMS Annual Meeting (since 2023).
- Student Liaison, INFORMS Women in Operations Research & Management Science (2024-Present)
- o Co-lead Editor, INFORMS Student Magazine ORMS Tomorrow (2024)
- o Social Media Coordinator, INFORMS Student Magazine ORMS Tomorrow (2023)

#### Session Chair

o Tensor-based Modeling and Control for Digital Manufacturing, 2025 INFORMS Annual Meeting

- K-12 Outreach: Collaboration across INFORMS Societies, 2025 INFORMS Annual Meeting
   Selected as a Committee's Choice panel session.
- o K-12 Outreach Panel: Collaboration across Institutions, 2024 INFORMS Annual Meeting
- o K-12 Education Outreach in a Post-COVID World, 2023 INFORMS Annual Meeting
- Advanced Machine Learning I, 2023 IISE Annual Conference & Expo
- Data Analysis Leveraging Novel Machine Leaning and Artificial Intelligence Methodologies IV,
   2023 IISE Annual Conference & Expo

#### Co-Organizer

- o Data Challenge, 2023 CVPR VISION workshop
- o Program Coordinator Team (Student Liaison), INFORMS To My Younger Self (TMYS) Program

#### Ambassador

o IEEEXtreme 15.0 Toronto Section Ambassador (2021)

**Judge & Reviewer** for Competition/Award

ASA Statistics Project Competition for Grades 7–12 (2024)

#### Session Coordinator

Teaching Professor Conference (2022)

# Institute Service

#### **Board Member**

- o President, INFORMS Georgia Tech Student Chapter (2023-2024)
  - Chapter received the Student Chapter Annual Award Summa Cum Laude at the 2024 INFORMS Annual Meeting.
- o Secretary, INFORMS Georgia Tech Student Chapter (2022-2023)
- Communication Coordinator, Graduate Super Women Engineers (GradSWE) University of Toronto (2021-2022)

#### Ambassador

- ISyE Bee Well Program (for Health and Wellness of Ph.D. students), Georgia Institute of Technology (2022-2024)
  - $\circ$  Led the department's logo competition for the  $\textit{Bee Well}\xspace$  program.

## Co-Organizer

University of Toronto Engineering Research Conference (2021)

#### Panelist

o Graduate Student Panel for Focus Program Campus Visit, Georgia Institute of Technology (2024)

## **Judge & Reviewer** for Competition/Award

- o ISyE AP Statistics High School Competition (2022)
- o President's Undergraduate Research Awards (2021-Present)

# **Presentations**

Invited	
Tensor-based Predictive Modeling and Process Control Rochester Institute of Technology, New York, USA	2025
Nonlinear Spatio-Temporal Run-to-Run Control <b>Quality and Productivity Research Conference</b> , Seattle, USA	2025
Tensor-based Predictive Modeling and Process Control  Oden Institute for Computational Engineering and Sciences, Austin, USA	2025
Tensor-based Predictive Modeling and Process Control  New York University, New York, USA	2025
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints  INFORMS Annual Conference, Seattle, USA	2024
Tensor-Based Feedback Control for Local Structured High-Dimensional Streaming Data under Limited Control Capability  Joint Statistical Meetings, Portland, USA	2024
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints  NSF Workshop on Urban Resilience, Georgia, USA	2024
Tensor-Based Feedback Control for Local Structured High-Dimensional Streaming Data under Limited Control Capability  INFORMS Annual Conference, Phoenix, USA	2023
Tensor-Based Feedback Control for Local Structured High-Dimensional Streaming Data under Limited Control Capability  INFORMS Data Mining and Decision Analytics Workshop, Phoenix, USA	2023
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints  INFORMS Data Mining and Decision Analytics Workshop, Phoenix, USA	2023
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints (Poster)	2023
Cornell ORIE Young Researcher Workshop, Ithaca, USA Tensor-Based Temporal Control for Partially Observed High-Dimensional Streaming	2023
Data INFORMS Annual Conference, Indianapolis, USA	2022
Exploration & Appreciation Women in Engineering: Mentoring Discussion, IEEE WIE Region 3, USA	2022
Contributed	
Nonlinear Spatio-Temporal Run-to-Run Control IEEE International Conference on Automation Science and Engineering, Los Angeles, USA	2025
Nonlinear Spatio-Temporal Run-to-Run Control IISE Annual Conference, Atlanta, USA	2025

Early Design-Stage Prognostics of Memory Products Using Finite Element Analysis <i>IISE Annual Conference</i> , <i>Atlanta</i> , <i>USA</i>	2025
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints (Poster)	
INFORMS Annual Conference, Seattle, USA	2024
Tensor-Based Feedback Control for Local Structured High-Dimensional Streaming Data under Limited Control Capability (Poster)  INFORMS Annual Conference, Phoenix, USA	2023
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints  IISE Annual Conference, Louisiana, USA	2023
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints (Poster)  IISE Annual Conference, Louisiana, USA	2023
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data- Sharing Constraints	
ISyE Ph.D. Student Seminar, Georgia, USA	2023
Tensor-Based Temporal Control for Partially Observed High-Dimensional Streaming Data (Poster)  INFORMS Annual Conference, Indianapolis, USA	2022
Tensor-Based Temporal Control for Partially Observed High-Dimensional Streaming Data ISyE Ph.D. Student Seminar, Georgia, USA	2022
A Pattern-Driven Stochastic Degradation Model for the Prediction of Remaining Useful Life of Rechargeable Batteries  *University of Toronto Engineering Research Conference*, Toronto*, Canada*	2021
A Pattern-Driven Stochastic Degradation Model for the Prediction of Remaining Useful Life of Rechargeable Batteries  **AMIGAS Student Seminar*, Toronto, Canada**	2021
A Pattern-Driven Stochastic Degradation Model for the Prediction of Remaining Useful Life of Rechargeable Batteries	
IMA International Conference on Modelling in Industrial Maintenance and Reliability Postponed Maintenance Scheduling Integrating State Variation and Environmental Impact	2021
University of Toronto Graduate Speaker Series, Toronto, Canada	2020
Remaining Useful Life Prediction Based on Kalman Filter Updated Samples  *Asia Pacific Conference of the Prognostics and Health Management Society, Beijing, China	2019
Professional Memberships & Affiliations	
Professional Organizations	
o American Society for Quality (ASQ)	
o American Statistical Association (ASA)	
<ul> <li>American Society of Mechanical Engineers (ASME)</li> </ul>	

- Decision Sciences Institute (DSI)
- o Institute for Operations Research and the Management Sciences (INFORMS)
- Institute of Industrial and Systems Engineers (IISE)
- o Institute of Electrical and Electronics Engineers (IEEE)
- International Society of Automation (ISA)
- Society for Industrial and Applied Mathematics (SIAM)
- Society of Manufacturing Engineers (SME)

# Honor Society.

O Alpha Pi Mu (AΠM), Industrial Engineering Honor Society

#### Licensure

o Student Member, Professional Engineers Ontario (PEO)

# References

## o Dr. Jianjun (Jan) Shi (Co-advisor)

Carolyn J. Stewart Chair and Professor

H. Milton Stewart School of Industrial and Systems Engineering Georgia Institute of Technology, Atlanta, GA, USA

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## o Dr. Kamran Paynabar (Co-advisor)

Fouts Family Chair and Professor

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