

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

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

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

M.Sc., Computational Science and Engineering

University of Toronto

M.A.Sc., Mechanical and Industrial Engineering

Beihang University

B.Eng., Safety Engineering

Atlanta, USA

2021–Present

2022–2024

Toronto, Canada

2019–2021

Beijing, China

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)

○ Selected from over 30 high-quality submissions.

○ Received during the 2nd 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

Gilbert F. “Gil” Amelio Engineering Fellowship (\$5,000), 2025

College of Engineering, Georgia Institute of Technology

○ 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)

- 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)

- 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

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

Bonder Scholar Grant (\$430), 2024

Institute for Operations Research and the Management Sciences (INFORMS)

- 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

- 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.
- 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)

- 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

- 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.
- 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.
- 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)

- 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.....

SSPA Conference Grant, 2025

Section for Statistical Programmers and Analysts (SSPA), American Statistical Association (ASA)

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.
- Presented 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

- Awarded to the top 5% of undergraduate graduates across universities in Beijing.

1st Prize (Beijing) – Mechanical Innovation and Design Competition, 2017

- Received a 1st Prize among 204 teams from 24 universities in Beijing.

1st Prize (Beijing) – Mathematical Modelling Contest, 2017

- Sole 1st Prize recipient from the department.

3rd Prize – National Undergraduate Mathematical Contest, 2016

Publications

Citations: 392 (**Google Scholar**, as of June 29, 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.

- Here 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[†], Lingchao Mao[†], **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.
- 2022 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.

- Here 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, *11th 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

PI & Co-PI.....

Sustaining Momentum: INFORMS K-12 Education Outreach and Networking Program

Co-PI, Jan 25-Dec 25

- Sponsor: Institute for Operations Research and the Management Sciences (INFORMS)
- Amount: \$3,000
- Collaborators: Kenneth Murphy (University of California, Irvine) & Fenglian Pan (University of Arizona) & Yifeng Wang (Georgia Institute of Technology)
- 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

- Sponsor: Institute for Operations Research and the Management Sciences (INFORMS)
- Amount: \$4,968
- Collaborators: Neil Desnoyers (Saint Joseph's University) & Fenglian Pan (University of Arizona)
- Involvement: Initiated the program; co-chaired the committee; led proposal development and project execution; organized the event and streamlined operations.

Significant Contributor.....

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

Feb 24-Feb 25

- Sponsor: Samsung Electronics
- Amount: \$150,000
- PI: Dr. Jianjun Shi
- 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.

NSF Peer Review Experience.....

DCC CAREER Mock-up Panel, 2025

Dynamics, Control and Cognition (DCC) Cluster, National Science Foundation (NSF)

- Involvement: Participated in a simulated NSF panel review, evaluating 4 CAREER proposals during a live 4-hour session. Gained hands-on experience in proposal assessment, collaborative discussion, review writing, and ranking decisions.

NSF CMMI Panel Fellow, 2024

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

- Involvement: Trained as a Panel Fellow in a program focused on enhancing peer review through effective communication, bias mitigation, and decision-making. Developed skills in facilitating fair, high-quality NSF panel deliberations using research-based strategies, peer interaction, and experiential learning.

Research Experience

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

Graduate Research Assistant, Aug 21-Present

- **National Science Foundation (NSF):** EAGER: Real-D: Integrating Data-Driven Methods and Engineering Models in Manufacturing Systems
- **Ford Motor Company:** Automated Claims Binning Using Active Learning
- **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
- **LG Electronics Canada:** Transfer Learning for Continual Learning in Non-Stationary Environments

Teaching Experience

Independent Course Instructor.....

ISyE 3039: Methods for Quality Improvement

Undergraduate Level

Georgia Institute of Technology

Sum 25

- Class Size: 17 students.

- 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

Georgia Institute of Technology

Graduate Level

Spr 24, 25

- Main Instructor: Dr. Jianjun Shi.
- Class Size: Approximately 10 students or more.
- 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.
- Module Sections: (i) Reliability Analysis & Accelerated Lifetime Testing; (ii) Image Processing; (iii) Dimensionality Reduction Techniques; (iv) Prognostics Methods; (v) Tensor-based Prognostics; (vi) Package Structure; (vii) System-Level Analysis; (viii) Finite Element Analysis-based Lifetime Analysis; (ix) Fundamentals of Control Theory; (x) Tensor-based Process Control.

ISyE 3039: Methods for Quality Improvement

Georgia Institute of Technology

Undergraduate Level

Fal 23, 24

- Main Instructor: Dr. Jianjun Shi.
- Class Size: Approximately 40 students or more.
- 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

- Instructor: Dr. Kamran Paynabar.
- Class Size: Approximately 100 students or more.
- 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

- Instructor: Dr. Jianjun Shi.
- Class Size: Approximately 40 students or more.
- 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

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

MIE 1615: Markov Decision Processes

University of Toronto

Ph.D. Level

Win 21

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

MIE 1723: Engineering Asset Management
Graduate Level

University of Toronto
Fal 20

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

SCS 3531: Physical Asset Management
Professional Program

University of Toronto
Fal 20

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

Mentoring Experience

Graduate Students.....

Mr. Dhavalkumar Patel
Industrial Engineering

University of Toronto
2021

- Topic: Physics-informed machine learning for lifetime analysis

Undergraduate Students.....

Mr. Joshua Do
Mechanical Engineering

Georgia Institute of Technology
2025

- Topic: Finite element analysis-assisted lifetime prediction

Ms. Yi Tong
Industrial Engineering

Georgia Institute of Technology
2023

- Topic: Tensor-based automatic process control

Ms. Jin Gong
Industrial Engineering

University of Toronto
2020

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

Service

Professional Service.....

Adhoc Journal & Conference Reviewer

- IISE Transactions
- IEEE Transactions on Automation Science and Engineering
- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Industrial Electronics
- 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
- INFORMS Workshop on Data Science
- North American Manufacturing Research Conference
- DSI Annual Conference
- Vision-based Industrial Inspection (VISION) Workshop @ CVPR, ECCV, ICCV
- International Conference on Mechanical, Electric and Industrial Engineering

Board Member

- Vice-chair, INFORMS Education Outreach Committee (2024-Present)
- Co-chair, INFORMS Education Outreach Committee K-12 Subcommittee (2022-Present)
 - Initiated **INFORMS K-12 Education Outreach and Networking Program**.
 - Initiated **STEM Spark: INFORMS K-12 Poster Competition**.
 - 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)
- Co-lead Editor, INFORMS Student Magazine ORMS Tomorrow (2024)
- Social Media Coordinator, INFORMS Student Magazine ORMS Tomorrow (2023)

Co-Organizer

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

Program Committee Member

- 2025 INFORMS Workshop on Data Science

Session Chair

- 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**.
- Classification and Regression, 2025 Quality and Productivity Research Conference
- Advanced Data-Driven Methods in Smart Systems, 2025 IISE Annual Conference & Expo
- K-12 Outreach Panel: Collaboration across Institutions, 2024 INFORMS Annual Meeting
 - Recap Article: *Fostering STEM Engagement: Insights from the K-12 Outreach Panel at INFORMS 2024*, LinkedIn, 2024.
- K-12 Education Outreach in a Post-COVID World, 2023 INFORMS Annual Meeting
 - Recap Article: *A Panel Discussion Recap and Future Outlook from the INFORMS Education Outreach Committee (EOC) K-12*, INFORMS ORMS Tomorrow, 2023.
- Advanced Machine Learning I, 2023 IISE Annual Conference & Expo
- Data Analysis Leveraging Novel Machine Learning and Artificial Intelligence Methodologies IV, 2023 IISE Annual Conference & Expo

Ambassador

- IEEEExtreme 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

- President, INFORMS Georgia Tech Student Chapter (2023-2024)
 - Chapter received the **Student Chapter Annual Award – Summa Cum Laude** at the 2024 INFORMS Annual Meeting.
 - Media Coverage: *Student Chapter Spotlight Interview – INFORMS Georgia Tech Student Chapter Board*, INFORMS ORMS Tomorrow, 2024.
 - Media Coverage: *ISyE Students Led INFORMS GT Chapter to Summa Cum Laude Distinction*, Georgia Tech ISyE News, 2024.
- 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)
 - Led the department’s logo competition for the *Bee Well* program.

Co-Organizer

- University of Toronto Engineering Research Conference (2021)

Panelist

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

Judge & Reviewer for Competition/Award

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

Presentations

Invited.....

Tensor-based Predictive Modeling and Process Control <i>Rochester Institute of Technology, New York, USA</i>	2025
Nonlinear Spatio-Temporal Run-to-Run Control <i>Quality and Productivity Research Conference, Seattle, USA</i>	2025
Tensor-based Predictive Modeling and Process Control <i>Oden Institute for Computational Engineering and Sciences, Austin, USA</i>	2025

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

Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data-Sharing Constraints <i>IISE Annual Conference, Louisiana, USA</i>	2023
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data-Sharing Constraints (Poster) <i>IISE Annual Conference, Louisiana, USA</i>	2023
Federated Multiple Tensor-on-Tensor Regression for Multimodal Data under Data-Sharing Constraints <i>ISyE Ph.D. Student Seminar, Georgia, USA</i>	2023
Tensor-Based Temporal Control for Partially Observed High-Dimensional Streaming Data (Poster) <i>INFORMS Annual Conference, Indianapolis, USA</i>	2022
Tensor-Based Temporal Control for Partially Observed High-Dimensional Streaming Data <i>ISyE Ph.D. Student Seminar, Georgia, USA</i>	2022
A Pattern-Driven Stochastic Degradation Model for the Prediction of Remaining Useful Life of Rechargeable Batteries <i>University of Toronto Engineering Research Conference, Toronto, Canada</i>	2021
A Pattern-Driven Stochastic Degradation Model for the Prediction of Remaining Useful Life of Rechargeable Batteries <i>AMIGAS Student Seminar, Toronto, Canada</i>	2021
A Pattern-Driven Stochastic Degradation Model for the Prediction of Remaining Useful Life of Rechargeable Batteries <i>IMA International Conference on Modelling in Industrial Maintenance and Reliability</i>	2021
Postponed Maintenance Scheduling Integrating State Variation and Environmental Impact <i>University of Toronto Graduate Speaker Series, Toronto, Canada</i>	2020
Remaining Useful Life Prediction Based on Kalman Filter Updated Samples <i>Asia Pacific Conference of the Prognostics and Health Management Society, Beijing, China</i>	2019

Professional Memberships & Affiliations

Professional Organizations

- American Society for Quality (ASQ)
- American Statistical Association (ASA)
- American Society of Mechanical Engineers (ASME)
- Decision Sciences Institute (DSI)
- Institute for Operations Research and the Management Sciences (INFORMS)
- Institute of Industrial and Systems Engineers (IISE)
- 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.....

- Alpha Pi Mu (AIIM), Industrial Engineering Honor Society

Licensure.....

- Student Member, Professional Engineers Ontario (PEO)

References

- **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
Email: jianjun.shi@isye.gatech.edu
- **Dr. Kamran Paynabar** (Co-advisor)
Fouts Family Chair and Professor
H. Milton Stewart School of Industrial and Systems Engineering
Georgia Institute of Technology, Atlanta, GA, USA
Email: kamran.paynabar@isye.gatech.edu