**A Message from the Chair**

Dear QSR Section members,

I would like to begin with thanking each one of you for your continued support for the QSR section in 2020-2021. While COVID19 pandemic has continued impacting our life and work, we achieved great success of engaging the QSR community with various activities, new initiatives, and new collaborative events jointly organized with other communities outside the QSR section!

This year, the QSR Section has sponsored 44 sessions (originally 49) in INFORMS 2021, which includes 6 joint sessions with other sections and societies, such as the Data Mining Section and the Health Application Society. Several surveys have been administered to best prepare and plan for the sessions. The sponsored sessions include 6-panel discussions (originally 8) on various topics including SBIR/STTR grants, Start-Ups, Internet of Federated Things, Automotive Industry, Data Science Journals Editors Perspective, and Student Introduction and Interaction Session. The QSR sessions also feature 4 competitions including the QSR best refereed paper competition, the QSR best student paper competition, the QSR best poster competition, and the QSR data challenge. There are also 3 journals focused sessions (originally 4) among QSR-sponsored sessions, including Technometrics, IISE Transactions, and Journal of Quality Technology (JQT). With the help of the International Subcommittee, the QSR has offered three international sessions, including one co-sponsored by ENBIS. The link between the QSR Section and the ENBIS community has been further strengthened this year with the QSR Session on Advancements in Industrial Data Science at the ENBIS-21 Online Conference (September the 15th, 2021). The session was chaired by Adel Alaeddini.

Finally, the QSR is sponsoring the QSR (virtual) business meeting, which is scheduled for Tuesday, OCT 26 at 6:15 pm PDT. For any questions, suggestions, or comments regarding the QSR sponsored session, please contact Adel Alaeddini (adel.alaeddini@utsa.edu).

The Zoom link to the 2021 QSR Business Meeting is the following: https://zoom.us/j/94925108535?pwd=eDJWLM1hJcijN1U0xshTGHvMUF5QT09 (meeting ID: 949 2510 8535; meeting password: AM2021).

This year, the QSR Section has also organized the 1st QSR Workshop at INFORMS Annual Meeting. The Workshop will be held in person and virtually on October 23, prior to the 2021 INFORMS Annual Meeting.

21 speakers will contribute to the Workshop and more than 85 attendees are expected (in-person and virtually). The Workshop consists of 10 sessions, including 4 invited sessions. The keynote speaker will be Professor C.F. Jeff Wu, the Coca-Cola Chair in Engineering Statistics and Professor in the H. Milton Stewart School of Industrial and Systems Engineering at Georgia Tech.

The Workshop will host the QSR Data Challenge Competition and the QSR Best
Student Poster Competition. A Technical Session on Federated Learning will be held by Professor Raed Al-Kontar from the University of Michigan. In addition, an Industry Session on Digital Twins and Industry 4.0 has been organized with Ford Motor Company.

The QSR Workshop is co-chaired by Abdallah Chehade, Ran Jin, and Kaibo Liu and the workshop executive committee includes Abdallah Chehade, Ran Jin, Kaibo Liu, Eunshin Byon, Ramin Moghaddas, Kamran Paynabar, and Kwok Tsui.

The details of the workshop can be found online at:
http://meetings2.informs.org/wordpress/anheim2021/1s_t-informs-workshop-on-quality-statistics-reliability/

This year, QSR organizes the 1st networking Reception Event at the INFORMS Annual Meeting. The QSR Reception Subcommittee conducted an in-depth analysis of the (local) venues and logistics for the QSR Reception. The Subcommittee also conducted a survey to collect QSR members’ plans. The Subcommittee includes Qiang Huang, Hao Yan, Mostafa Reisi Gahrooei, Bing Si, and Adel Alaeeddini. In order to promote networking among QSR members while providing flexibility in the gathering, QSR will not hold a big reception event for all QSR members this year. Instead, QSR will sponsor each QSR member one dinner based on a per diem rate of $66.00. All the QSR members will be eligible for this reimbursement as long as they attend the conference in person and provide a picture during the gathering (individual or group of members).

As in previous years, the QSR Section organizes and hosts various competitions.

The QSR Best Paper Competition was chaired by Fugee Tsung (Chair), Hong Kong University of Science and Technology, Satish Bukkapatnam, Texas A&M University, Jing Li, Georgia Institute of Technology, and Kamran Paynabar, Georgia Institute of Technology. This year, we received 27 high-quality submissions. Each paper was reviewed by at least two reviewers and based on the reviewers' comments and scores, the following four finalists were selected (alphabetically ordered by the last names of the first author):

- Miao Bai, Dongmin Li, and Xiaochen Xian, Data-driven Pathwise Sampling Approaches for Online Anomaly Detection.
- Cheolhei Lee, Kaiwen Wang, Jianguo Wu, Wen jun Cai and Xiaowei Yue, Partitioned Active Learning for Heterogeneous Systems.
- Xubo Yue, Maher Nouiehed, and Raed Al Kontar, An Approach for Group and Individual Fairness in Federated Learning.
- Ruda Zhang, Simon Mak, and David Dunson, GPS: Gaussian Process Subspace Regression for Model Reduction.

The finalists will present their work on Monday, October 25 at 4:30pm-6:00pm (PT) in the presence of a panel of judges, and the winner will be announced in the QSR business meeting.

The QSR Best Student Paper Competition was chaired by Bianca M. Colosimo (Chair), Politecnico di Milano, Tapas K. Das, University of South Florida, Qiang Huang, University of Southern California, and Ran Jin, Virginia Tech. We received 25 high-quality papers. Each paper was evaluated by at least three referees. Based on the referees' evaluation, four finalists were selected, shown as follows (alphabetically ordered by the last names of the first author):
• Amirhossein Fallahdizcheh, University of Iowa, Data-level Transfer Learning for Degradation Modeling and Prognosis,
• Yinan Wang, Virginia Tech, NP-ODE: Neural Process Aided Ordinary Differential Equations for Uncertainty Quantification of Finite Element Analysis,
• Hui Wu, Tsinghua University, Adaptive Graph-Based Support Vector Data Description for Weakly-Supervised Anomaly Detection,
• Xueqi Zhao, Pennsylvania State University, A Registration-free Approach for Statistical Process Control of 3D Scanned Objects via FEM.

The finalists will present their work on Sunday, OCT 24 at 6:00 AM-7:30 AM (PST) in the presence of a panel of judges, and the winner will be announced in the QSR Business Meeting.

We would like to express our congratulations to all finalists of both the QSR Best Student paper and the QSR Best Paper Competitions, many thanks to the referees for their time and efforts in review, and many thanks to all participants.

This year, the QSR Data Challenge Competition was made possible by a collaboration between Politecnico di Milano (www.polimi.it - Italy) and Trumpf (www.trumpf.com - Germany), fostering open data science for in-situ quality process monitoring in Additive Manufacturing.

The objective of the Data Challenge was to develop a Statistical Process Monitoring procedure that can detect anomalies during a Laser Powder Bed Fusion Process as soon as possible while achieving the best compromise in terms of false positives and false negatives. To this aim, real data measured in-line and in-situ via a co-axial photodiode during the production of metal specimens were provided.

The Data Challenge Award is aimed to recognize excellence in data modeling techniques, and it brings prestige to the QSR Section as well as to the recipients honored.

There were three finalists for this year's competition. The submissions were evaluated by an online model testing platform developed by QSR members Xiaoyu Chen (University of Louisville) and Ran Jin (Virginia Tech). The three finalists (in random order) were:

• Yuanyuan Gao, Ruiyu Xu, Zheren Song, Song Huang - Peking University, Department of Industrial Engineering and Management
• Dongmin Li, Xin Zan - University of Florida, Department of Industrial and Systems Engineering
• Min Qian, Yanan Wang, Wenqiang Zheng, Huan Wang - Tsinghua University, Department of Industrial Engineering

The finalists will make presentations on Saturday, October 23 at 2:30 - 3:40 PM (PDT) during the First QSR Workshop prior to the 2021 INFORMS Annual Meeting. A panel of judges will select one best team, and the results will be announced at the QSR Business Meeting.

Congratulations to the finalists! Many thanks to Trumpf GmbH, Marc Gronle and Frederik Schaal from Trumpf, and Bianca Maria Colosimo, Marco Grasso, and Emidio Granito from the Department of Mechanical Engineering at Politecnico di Milano for creating this year's unique open data challenge and providing data on a Laser Powder Bed Fusion (L-PBF) additive manufacturing process for the competition! Also, many thanks to Ramin Moghaddass, Xiaoyu Chen, Ran Jin, and Kamran Paynabar for all their time, hard work, and efforts in the organization and evaluation for the competition!
The QSR Best Student Poster Competition was chaired by Mingyang Li, University of South Florida, and Ruizhi Zhang, University of Nebraska-Lincoln. So far, 12 students have submitted their posters for review. They will also give a short presentation of their poster virtually during the 1st QSR Workshop.

Another initiative for the students of the QSR Section consists of the new edition of the Student Interaction Section, which was chaired by Mostafa Reisi-Gahrooei, University of Florida and Xiaolei Fang, North Carolina State University. It will be held on Monday, Oct 25, 2021, 2:45 PM - 4:15 PM (PDT) in Virtual Room 22. So far, we have seven students as participants, mainly from Georgia tech, University of Michigan, University of Wisconsin-Madison, and Binghamton University. The session will start with a short introduction of each student, and then the panelists Tapas Das, Yisha Xiang, Haitao Liao, Devashish Das (from Amazon) and Samaneh Ebrahimi (from Pandora) will discuss topics related to academia and industry. Finally, there will be a virtual interaction session where all students, panelists, and other participants can chat and share ideas. A different platform will be used for this part of the session, e.g., ‘Gather Town’, to foster an active interaction in a smart virtual environment.

This year, great effort has been put by the QSR Subcommittees in the organization, management and dissemination of many initiatives that make our Section one of the most active INFORMS sections.

The QSR Conference Subcommittee conducted conference planning and data analytics for QSR sessions and surveys. The committee includes Xiaochen Xian, Chenang Liu, and Hongyue Sun.

The QSR Sponsorship Subcommittee was chaired by Wenmeng Tian (Mississippi State University) with Hongyue Sun (University at Buffalo) as the volunteer. The committee worked on the sponsorship campaign for the special events of QSR during the 2021 INFORMS Annual Meeting, including the 1st QSR Pre-conference Workshop and the 1st QSR sponsored dinner. The subcommittee has successfully raised $6,800 in total of sponsorship, which provides substantial financial support for the special events of QSR. All the sponsors have been acknowledged by providing a customized plaque as well as in the acknowledgement section of the newsletter, at the QSR business meeting, the QSR website and the onsite events.

The QSR Membership Growth Subcommittee was co-led by Weihong “Grace” Guo (Rutgers University) and Eunshin Byon (University of Michigan), with members Xiao Liu (University of Arkansas), Xiaowei Yue (Virginia Tech), Dongping Du (Texas Tech University), Na Zou (Texas A&M University) and volunteers Ahmed Aziz Ezzat (Rutgers University), Xiaochen Xian (University of
Florida), Rajitha Meka (Rivian Automotive), and Jack Francis (KBR). The committee worked on membership promotion including creating flyers and sending emails to encourage membership renewal/growth, promoting QSR activities in related conferences, nominating QSR members for INFORMS awards/committees, and analyzing QSR membership data.

The QSR Academic Subcommittee was chaired by Abdallah Chehade (UM-Dearborn), with members Xiao Liu (University of Arkansas) and Hongyue Sun (SUNY Buffalo). They continued last year’s effort to serve and promote the academic activities of the QSR Community within and beyond INFORMS. This year, the most important activity was the organization of the 1st INFORMS QSR Workshop. A total of 21 speakers contributed to the Workshop and more than 85 attendees are expected (in-person and virtually). The Workshop consists of 10 sessions, including 4 invited sessions.

The QSR Industry Relation Subcommittee was chaired by Arman Sabbaghi (Purdue University, QSR Council Member), along with the volunteers Xinwei Deng (Virginia Tech), Kamran Paynabar (Georgia Institute of Technology), Raquel Ferreira (Intel), Nagi Gebrael (Georgia Institute of Technology), and Shan Ba (LinkedIn). They continued last year's focus on enhancing the industry-academia collaborations and increasing our QSR visibility and impact in the industry. Three invited panel sessions were created for this purpose: Challenging Research Problems in the Automotive Industry (with panelists Dr. Saman Alani-Azar from Ford Motor Company, Frank Sun from Tesla, Weihong "Grace" Guo from Rutgers University, and Shiming Duan from GM); Fundamentals of Start-Ups (with panelists Kamran Paynabar and Nagi Gebrael from the Georgia Institute of Technology); and Applying for SBIR/STTR Grants (with panelist Peter Atherton from the National Science Foundation). The invited session Advances in Statistics and Reliability for Industry and Government was also created to foster research discussions among members of academia and industry. The speakers in this session were Elsayed A. Elsayed (Rutgers University), Saman Alani-Azar (Ford Motor Company), and Mark S. Squillante (IBM Research).
The **QSR International Subcommittee** was chaired by Yili Hong (Virginia Tech), with members Yifu Li (Oklahoma University), Chelsea Jin (Binghamton), Raed Al Kontar (University of Michigan), and Xinchao Liu (University of Arkansas). The committee works on Webinar Series for QSR members through INFORMS platform and we now have joint Webinars with ENBIS. We organized three special sessions featuring researchers from European, East Asia, Middle East, and other areas in QSR for INFORMS 2021. We also conducted outreach to international conference IEEM to increase the visibility of QSR in Asia areas and held an QSR session in ENBIS titled “Advancements in Industrial Data Science.”

The **QSR Webinar Series** was chaired by Yifu Li. This year, five inspiration webinars have been offered by Ming J. Zuo (University of Alberta), James Kong (Virginia Tech), Dan Apley (Northwestern University), Raed Al Kontar (University of Michigan), and Irad Ben-Gal (Tel Aviv University). The topics cover machine learning, reliability, data analytics, smart manufacturing, and artificial intelligence. The webinar series have provided unique opportunities for members to learn about cutting edge research enabled by the QSR Section and discuss research questions with leaders in relevant fields. QSR members can find the presentation videos and slides at INFORMS YouTube Channel. If you are interested to become a future webinar speaker and publicize your research, please contact the committee to sign up.

The **QSR Public Communication Subcommittee** was chaired by Marco Grasso (Politecnico di Milano), with members Ahmed Aziz Ezzat (Rutgers University) and Xiaoyu Chen (University of Louisville) and volunteers Hao Yan (Arizona State University) and Andi Wang (Arizona State University). The committee supports the QSR Section and all other QSR subcommittees regarding public communication activities, including surveys, social media (https://twitter.com/INFORMS_QSR, https://www.linkedin.com/groups/3793057), posts and email moderation for the QSR mailing list. The committee is also in charge of updating the QSR website and preparing the annual QSR newsletter. This year, the committee also organized the 1st QSR Virtual Happy Hour which was held on June 4th, 2021. It was an opportunity for our members to be together and (virtually) meet our friends and colleagues, amid COVID-19 restrictions. The committee was also actively involved in the creation of the website for the 2021 QSR Data Challenge Competition.

As you can imagine, the QSR Council members and volunteers put their tremendous efforts, such that every QSR member received more benefits and QSR Section could keep growing stronger in the long term. I would like to take this opportunity to express my sincere gratitude for their dedicated services to QSR members. The QSR Council looks forward to having more volunteers to join in various activities in the future. I would like to also thank the QSR Advisor Board for their advice and continuous support to our community! The advice from the QSR Advisory Board helped us find appropriate directions that QSR Council should follow.
What is more, I would like to sincerely thank for the generous sponsorships from Mississippi State University, University of Arkansas, Georgia Institute of Technology, Rutgers University, University of Wisconsin-Madison, University at Buffalo, Virginia Tech and University of Michigan-Dearborn, without whom it is impossible for us to have a fruitful year even during this difficult time.

Finally, I hope you will enjoy the first hybrid annual INFORMS conference. I look forward to e-meeting with you in our virtual business meeting!

Yours sincerely,

Kaibo Liu
Chair of the QSR Section, INFORMS

2020 Conference Review

INFORMS Annual Meeting, Virtual Event,
November 7-13, 2020

The 2020 INFORMS Annual Meeting was held in virtual mode for the first time. Despite the difficulties imposed by the COVID-19 pandemic and the severe restrictions, the QSR Section created many activities. This was made possible thanks to the QSR Advisory Board, QSR Council members, and many volunteers who contributed to the success of the virtual event.

The QSR Section was again among the most active sections in the INFORMS, with 38 sponsored sessions. These sessions included:

- four award competition sessions (best refereed paper competition, best student paper award competition, industrial data challenge competition, and student interaction and poster competition)
- two journal sponsored sessions (IISE Transactions and JQT)
- two panel discussion sessions on industry job application and editor's perspective in publishing data science-focused papers
- five joint sessions with Data Mining, Public Sector OR and ENRE-Energy-Climate.

The four award competitions received several high-quality submissions (26 submissions for the QSR Best Student Paper Competition, 26 submissions for the QSR Best Refereed Paper Competition, and 14 participations for the QSR Industrial Data Challenge Competition). The Student Interaction session with the QSR Best Student Poster Competition was a highly successful virtual event too, which provided QSR student members the opportunity to present and share their research within the QSR community and to potential future employers.

The winner and the finalists of the 2020 QSR Best Paper Competition are:

Xinyu Zhao, Jiuyun Hu, Yajun Mei and Hao Yan, "Adaptive Partially-Observed Sequential Change Point
Detection with Multiple Failure Modes". (WINNER)

Pooyan Mobtahej, Xulong Zhang, Maryam Hamidi and Jing Zhang, "Deep Learning-based Anomaly Detection for Compressors Using Audio Data".

Bo Shen, Rongxuan Wang, Andrew Chung Chee Law, Rakesh Kamath, Hahn Choo and Zhenyu (James) Kong, "Super Resolution for Multi-Sources Image Stream Data using Smooth and Sparse Tensor Completion and its Applications in Data Acquisition of Additive Manufacturing".

Andi Wang and Jianjun Shi, "Holistic Modeling and Analysis of Multistage Manufacturing Processes with Sparse Effective Inputs and Mixed Profile Outputs".

The winner and the finalists of the 2020 QSR Best Student Paper Competition are:

Jialei Chen, Georgia Institute of Technology, "Adaptive Design for Gaussian Process Regression under Censoring". (WINNER)

Zhehui Chen, Georgia Institute of Technology, "A hierarchical expected improvement method for effective Bayesian optimization".

Ziyue Li, Hong Kong University of Science and Technology, "Tensor Completion for Weakly-dependent Data on Graph for Metro Passenger Flow Prediction".

Ruiyu Xu, Peking University, "Online Structural Change-point Detection of High-dimensional Time Series via Dynamic Sparse Subspace Learning".

The winner and honorable mention of the 2020 QSR Best Student Poster Competition are:

Ana Maria Estrada Gomez, Georgia Institute of Technology. (WINNER)

Minhee Kim, UW-Madison. (Honorable Mention)

The winner and the finalists of the 2020 QSR Industry Data Challenges are:

Werner Jiang and Min-hwan Oh, Columbia University. (WINNER)

Maede Maftouni, Andrew Chung Chee Law, Yangze Zhou, and Bo Shen, Virginia Tech/Purdue University. (Runner Up)

Hang Dong and Xiaoting He, Microsoft Research/Amazon Web Services.

Seonho Park, Farnaz Babaie Sarijaloo, and Bijan Taslimi, University of Florida.

Changes in the QSR Advisory Board

The QSR Advisory Board, currently consisting of 15 senior leaders in the field of Quality, Statistics and Reliability, has strongly contributed to the development of QSR section
and has been providing support to the continuous improvement of the Section.

Professor Elsayed Elsayed at Rutgers University is currently serving as the chair of the board for 2020-2023. The board oversees the operation of QSR, provides advice on various activities, and supports the QSR officers to run the QSR section effectively and efficiently.

According to the QSR By-Law, as many as one-third of the advisory board can be newly appointed each year. This coming year, five board members will retire at the end of the 2021 INFORMS annual conference and five new members will join the board after the conference, as follows.

Five retiring Advisory Board members: Prof. Yu Ding (Texas A&M University), Prof. Tapas Das (University of South Florida), Prof. Kwang-jae Kim (POSTECH), Prof. Roshan Joseph (Georgia Tech), Prof. Fugee Tsung (KHUST).

Five new board members: Prof. Kwok Tsui (Virginia Tech), Prof. Frank Sun (Tesla), Prof. Cole Smith (Syracuse University), Prof. Allison Jones-Farmer (Miami University), Prof. Jingshan Li (Tsinghua University).

We thank the retiring board members for their sincere advice and support for the QSR community and look forward to working with new board members in the following years.

Member updates

Honors and Awards Received

Eunshin Byon has been elected as the INFORMS Section representative in the Subdivision Council, 2021.

Kaibo Liu received the Award for Technical Innovation in Industrial Engineering from Institute of Industrial and Systems Engineers (IIE), 2021.

Ahmed Aziz Ezzat was the recipient of the "IIF-SAS Research Award (Methodology Track)," a financial grant from SAS and the Institute of International Forecasters (IIF) for research on how to improve forecasting methods, for the project titled: "Forecasting in Unknown Territory: Towards Physically Motivated Learning for Local Wind Fields," 2020.

Ahmed Aziz Ezzat was the recipient of the "Rutgers OAT Teaching Award," a research award to Rutgers faculty who make their courses more open and affordable for their students by using low-cost materials, and creating open educational resources, 2020.

Zhenyu (James) Kong was recognized as one of the 20 Most Influential Academics in Smart Manufacturing honored by the SME’s Smart Manufacturing magazine.

Grants Received

Adel Alaeddini (PI) received $351,000 from Air Force Office of Scientific Research (AFOSR) for the proposal entitled “A Novel Semi-Supervised Kernel Formulation for Extrapolation from Small Datasets: Rapid Predictive Modeling of the Effect of a Leeway Object Geometry on its Drift and Divergence in Deep Waters”.

Adel Alaeddini (Co-PI) received $183,976 from San Antonio Medical Foundation (SAMF) for the proposal entitled “Biometric Collaborative Radiology Artificial Intelligence”.

Adel Alaeddini (PI) received $30,000 from Air Force Office of Scientific Research (AFOSR) for the proposal entitled “Adaptive Formation of Teams of Experts”.
Wenmeng Tian (PI) received the NSF CAREER award for the proposal entitled “CAREER: Privacy-preserving Transfer Learning for Process-defect Modeling toward Accelerated Cross-system Certification for Metal Additive Manufacturing”, $515,651.


Zhenyu (James) Kong and his collaborators from five other universities received additional funding from the Office of Naval Research’s Multidisciplinary University Research Initiative (MURI) for their ongoing project entitled “Rationalization of Liquid/Solid and Solid/Solid Interphase Instabilities during Thermal Mechanical Transients of Metal Additive Manufacturing.” The additional funding is $3M for two years on top of the original project of three years.

Zhenyu (James) Kong, C. Williams, and E. Komendera received a grant from the Office of Naval Research for a project entitled “Intelligent Toolpathing for Part Repair via Hybrid Wire Arc Additive Manufacturing.” The total funding is $598K for three years.

Zhenyu (James) Kong received a grant from the American Bureau of Shipping for a project entitled “Standards/Guidance for Rapid Qualification of Metal-Based Additive Manufacturing.” The total funding is $140K for two years.

Xiaowei Yue (PI) received a grant for the project titled: “Ultra-high Precision Assembly of Aerospace Composite Structures: Fusing Physics-Based and Data-Driven Models”. Amount funded: $319,386. Sponsor: National Science Foundation.

Ramin Moghaddass (PI & Director), Associate Professor of Industrial Engineering, University of Miami, received a grant for a project whose purpose is: through various research, training, and educational activities, the project will focus on energy analytics and efficiency, improving productivity, enhancing cybersecurity, promoting resiliency planning, and providing training to various small-to-medium-sized manufacturing entities in Florida and Puerto Rico. Amount: Federal Funding: $1.7M for 5 years (2021-2026), Total Project cost: $2.1M. Source: Department of Energy, office of Energy Efficiency & Renewable Energy.

Chao Wang (Co-PI), Assistant professor in the department of Industrial and Systems


Arman Sabbaghi (Co-PI) Statistician for NIH Grant No. 1R01HD106413-01: Multi-Site, Longitudinal Trial Evaluating the Efficacy, Mechanisms, and Moderators of Service Dogs for Military Veterans with PTSD. 9/2021 - 8/2026. Lead PI: Marguerite O’Haire, Purdue University, West Lafayette, IN. Total Funding: $674,582.

Arman Sabbaghi (PI) for Eli Lilly and Company Research Agreement ($45,000): Tripartite Estimands for Adherence Causal Inference in Clinical Trials. 5/2021 - 12/2021.

Abdallah Chehade (PI) received $199,000 from Ford Motor Company for “Validation and Verification of the Safety of Automated Driving Assist Systems”.

Murat Yildirim (PI), received a grant from NSF (#2114425) for: “GOALI: Collaborative Research: Generation versus degradation: Striking the optimal balance for wind farm profitability via digitalization, predictive, and prescriptive analytics.” $225K, 08/2021-08/2024.

Murat Yildirim (PI), received a grant from Ford Motor Company for “New Architecture for Vehicle Health Management to enhance scalability and data privacy” $150K, 07/2021-07/2024.

Murat Yildirim (Co-PI) and his collaborators from two national laboratories and one university, received a grant from Department of Energy for “Harnessing Sensor Data for Degradation Analytics and Operations & Maintenance Optimization in PV Systems: A Prognostic Approach” $2.85M (share = $330K), 10/2021-10/2024.


Murat Yildirim (Co-PI), received a grant from NSF (#2054691) for: “I-Corps: AI-enabled automation intelligence software that can detect micro-anomalies in machine and robotic operations” $50K (share = $25K), 01/2021-06/2021.

Ph.D. Degrees Earned and Promotions


Zhenyu (James) Kong (2021) was appointed as the Focused Issue Editor for Design and Manufacturing of the IISE Transactions, effective on July 1st, 2021.


Xiaoyu Chen (2021) New Position: Assistant Professor at the Department of Industrial Engineering at the University of Louisville.

Feng Ju (2021) New Position: Associate Professor of Industrial Engineering in the School of Computing and Augmented Intelligence, Arizona State University.

Dongping Du (2021) New Position: Associate Professor at the Department of Industrial Engineering, Texas Tech University.

Jialei Chen (2021) New Position; Assistant Professor at the Department of Statistics, University of Georgia.

Nathan Gaw (2021) New Position: Assistant Professor, Department of Operational Sciences, Air Force Institute of Technology, Wright-Patterson AFB, OH.

Other news

Ahmed Aziz Ezzat (Rutgers University) and Manish Bansal (Virginia Tech) co-organized a virtual panel discussion, as part of Junior Faculty Interest Group (JFIG), on "Industry Funded Research & Projects: A Guide for Junior Faculty," which discussed industry-funded research and projects, including how to approach industrial partners, how to secure industrial funding, how to manage industry-funded projects, and how to maintain a successful industry-academia collaboration. The panel featured an outstanding lineup of speakers including Prof. Pascal Van Hentenryck (Georgia Institute of Technology), Prof. Karla Hoffman (George Mason University), Prof. Mohsen Jafari (Rutgers University) and Prof. Julie Swann (NC State University). The recording is publicly available online at:

https://www.youtube.com/watch?v=AXEAmMrvjE

Weihong “Grace” Guo (Rutgers University) gave a keynote speech at the 2021 IEEE International Conference on Robotics and Automation (ICRA) on “Manufacturing Automation – Digital Thread of Metal Additive Manufacturing.”

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Call for papers: Special Issue on AI and Machine Learning for Manufacturing, IISE Transactions: Focused Issue on Design and Manufacturing.

As a trend of future manufacturing, consumer demand increasingly shifts to personalization, customization, and consumer-maker co-creation. Intertwined with these changing demands, rapid technology advances in new manufacturing technologies, Internet of Things (IoT), robotics, AI and machine learning methods, have significantly expanded, and are continually expanding manufacturing capability, utility, and accessibility. Manufacturing processes and systems have become more connected, intelligent, agile, and collaborative. The special editor team senses that we are right now at a critical juncture of the manufacturing revolution. IISE Transactions Design and Manufacturing Focused Issue is hereby organizing a special issue to capture this moment and capitalize this opportunity. This special issue has two primary objectives: (a) showcase how the AI and machine learning methods have reshaped the landscape of manufacturing in its research and practice; and (b) bring a community of researchers in multiple disciplines to establish new theories, methodologies, and tools to enable smart and intelligent manufacturing by taking full advantage of the recent AI and machine learning innovations.

The topics include, but will not be limited to the following: AI methodologies for manufacturing, Cybersecurity for manufacturing, Digital twins for manufacturing, Fabrication-aware machine learning, Human-robot collaborative manufacturing, Intelligent manufacturing machines or processes (e.g., smart 3D printers), Intelligent manufacturing systems, Intelligent maintenance for manufacturing, Machine learning enabled in-process quality improvements methods, Machine learning enabled design optimization, Machine learning-based collaborative manufacturing, Manufacturing-as-a-Service (MaaS), New anomaly detection algorithms with limited supervision, New advances in cyber-physical manufacturing systems and Industry 4.0, Novel manufacturing such as space manufacturing, Physical model-guided machine learning for manufacturing, Smart monitoring and control of
manufacturing, Smart sensing and IoT for manufacturing.

Papers must be submitted through http://mc.manuscriptcentral.com/iietransactions and prepared according to the journal’s Instructions for authors. Select “Special Issue” for the question “Please select the Focus Issue to which the paper is most related” at Step 1 in the submission process, and select the specific special issue at Step 6. We highly encourage authors to submit abstracts to the lead editor (qiang.huang@usc.edu) in order for the editorial team to provide feedback on the submission and to facilitate a timely review of the full paper.

Important Dates

- (Encouraged) Abstract Submission: 3/31/2022
- Manuscript submission: 6/30/2022
- Completion of 1st round review: 9/30/2022
- Completion of 2nd round review: 1/31/2023
- Final manuscript submission: 3/1/2023
- Tentative publication date: 7/2023

Guest Editors

Qiang Huang (University of Southern California), Bianca Maria Colosimo (Politecnico di Milano), John Hart (Massachusetts Institute of Technology), Conrad Tucker (Carnegie Mellon University), Lihui Wang (KTH Royal Institute of Technology).

Focus Issue Editor

Zhenyu (James) Kong (Virginia Polytechnic Institute and State University).

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https://www.youtube.com/channel/UCRscxnV_WgAGU6SOoTo0UUQ

INFORMS QSR Twitter:
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Announcements

Job Openings

Faculty position at all ranks at the Information Hub, HKUST(GZ)

Applications are invited for appointment in Data Science and Analytics at all ranks. The positions are under the Data Science and Analytics Thrust of the Information Hub, the Hong Kong University of Science and Technology, Guangzhou campus (HKUST(GZ)). All areas of data science/statistics/optimization/analytics will be considered, with special attention to those interested in cross-disciplinary research.

Remuneration

HKUST(GZ) offers a highly competitive salary of international standards and is commensurate with qualifications and experience. Generous research funds, ample laboratory space, and excellent research equipment and support will be
provided. Housing allowances will also be provided.

**Application Procedure**

Please submit the application via the HKUST/HKUST(GZ) Recruitment System (https://facrecruit.hkust.edu.hk/). You should first sign up to create your personal account. For more information, please visit the recruitment website:

[https://gz-faculty-recruitment.hkust.edu.hk/](https://gz-faculty-recruitment.hkust.edu.hk/)

**About the Data Science and Analytics Thrust in the Information Hub, HKUST(GZ)**

HKUST(GZ) offers a unique educational environment with four transdisciplinary hubs and 16 thrust areas. Data Science and Analytics Thrust are under The Information Hub. More information can be found at [https://hkust-gz.edu.cn/academics/four-hubs/information-hub](https://hkust-gz.edu.cn/academics/four-hubs/information-hub).

HKUST(GZ) is situated in Nansha District, Guangzhou, right in the center of the Greater Bay Area. It is about 30 minutes away from Hong Kong by high-speed train. The campus is planned to open in 2022. More details can be found at [https://hkust-gz.edu.cn/](https://hkust-gz.edu.cn/)

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**Industrial & Systems Engineering at the University of Wisconsin-Madison** has two open faculty positions.

We are seeking candidates in (1) manufacturing and production systems, and (2) human factors and ergonomics.

**Manufacturing production systems:** Research areas of interest include but are not limited to smart manufacturing including system-level modeling and analysis, planning and scheduling, supply chain management; system automation and process control; human-automation interaction and human-robot interaction; data-driven modeling, analysis and improvement of system operations and decision making; digital twins; and the security of cyber-physical industrial systems.

**Human factors and ergonomics:** Research areas of particular interest are human interaction with health systems or technologies, with an emphasis on healthcare delivery, wearable technologies, artificial intelligence and machine learning, medical equipment and instrumentation, clinical simulation, equity and reducing disparities, health and wellbeing, patient safety, or occupational injury prevention.

Applicants should have an outstanding academic record, exceptional potential for creative research, and a commitment to both undergraduate and graduate education in industrial and systems engineering. Applicants are expected to create and maintain a strong program of research, provide classroom and individual training for undergraduate and graduate degree-seeking students, and contribute to the intellectual and academic life of the department. University and professional service will be expected as appropriate.

Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background - people who as students, faculty, and staff serve Wisconsin and the world.

The deadline for assuring full consideration is October 15, 2021, however, the position will remain open and applications may be considered until the position is filled.
More information and apply at:
https://jobs.hr.wisc.edu/en-us/job/510336/professor

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The Department of Industrial and Operations Engineering at the University of Michigan invites applications and nominations for faculty positions beginning September 2022.

We seek outstanding candidates for faculty positions at all levels including assistant, associate, and full professor. Our department is highly multidisciplinary, with a balance of theoretical and methodological research and applied research interests. From a methodological perspective, we will be considering candidates in all areas related to Industrial and Operations Engineering, including Operations Research, Human-System Integration, Data Analytics, and related disciplines. The many application areas in the department include operations management, health and human safety, energy and sustainability, mobility and transportation, public policy, manufacturing, and robotics. Candidates must have, or be near completion of a Ph.D., and must demonstrate a strong commitment to high-quality research and evidence of teaching potential.

Please submit your application to the following: https://ioe.engin.umich.edu/about/careers/

Candidates should provide (i) a current C.V., (ii) a list of at least three references, and three summary statements of up to two pages each describing, respectively: (iii) career teaching plans; (iv) research plans; and (v) activities, contributions, or plans related to supporting diversity, equity, and inclusion. For candidates with prior teaching experience, please provide (vi) a summary of course (teaching) evaluations. Candidates should also have their references send three letters of recommendation to us directly at IOEFacultySearch@umich.edu.

Applications will be reviewed on a rolling basis until appointments are finalized. For full consideration, candidates are encouraged to apply by October 15, 2021.

Michigan Engineering’s vision is to be the world’s preeminent college of engineering serving the common good. This global outlook, leadership focus, and service commitment permeate our culture. Our vision is supported by a mission and values that, together, provide the framework for all that we do. Information about our vision, mission, and values can be found at: http://strategicvision.engin.umich.edu/.

We seek faculty members who commit to excellence in graduate and undergraduate education, will develop impactful, productive and novel research programs, and will contribute to the department’s goal of eliminating systemic racism and sexism by embracing our culture of Diversity, Equity and Inclusion (DEI). We are especially interested in candidates who can build collaborative ties with other departments within the College of Engineering and the University. The University of Michigan is responsive to the needs of dual career families.

If you have any questions regarding the web application submittal process or other inquiries, please contact Akosua Dow, akosuad@umich.edu.

U-M COVID-19 Vaccination Policy
COVID-19 vaccinations are now required for all University of Michigan students, faculty and staff across all three campuses, including Michigan Medicine, by the start of the fall term on August 30, 2021. This includes those working or learning remotely. More information on this
policy is available on the Campus Blueprint website.

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The Department of Industrial and Systems Engineering at Rutgers University invites applications and nominations for two faculty positions.

Details will be announced soon.

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QSR-Related Faculty Openings in Purdue’s Department of Statistics:

The Department of Statistics has several positions this year. Their descriptions follow at the links below.

Associate Professor of Statistics:

https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=16325&company=purdueuniv

Assistant Professor of Statistics:

https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=16061&company=purdueuniv

Assistant Professor of Statistics, Data Science:

https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=16339&company=purdueuniv

Assistant Professor of Practice:

https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=16298&company=purdueuniv

Lecturer in Statistics:

https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=16056&company=purdueuniv

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The H. Milton Stewart School of Industrial and Systems Engineering at Georgia Tech has multiple faculty positions.

The H. Milton Stewart School of Industrial and Systems Engineering at the Georgia Institute of Technology in Atlanta, Georgia, invites applications for multiple faculty positions. Appointments can be made at the Assistant Professor, Associate Professor, and Professor ranks, commensurate with the individual's record. Applicants from all research areas will be considered, including advanced manufacturing; analytics and machine learning; applied probability and simulation; data science and statistics; economic decision analysis; energy and sustainable systems; health and humanitarian systems; optimization; supply chain engineering; and system informatics and control.

Successful candidates will be expected to lead independent research at the cutting edge of their field and build a strong sponsored-research program. Candidates are also expected to demonstrate an exceptional commitment to the teaching and mentoring of a diverse student body. Along with undergraduate and graduate teaching, each position requires a balance of research and service responsibilities.

Georgia Tech is a top-ranked public research university situated in the heart of Atlanta, a diverse and vibrant city with great economic and cultural strengths. The Institute is a member of the University System of Georgia, the Georgia Research Alliance, and the Association of American Universities.

Georgia Tech prides itself on its technology resources, collaborations, high-quality student body, and its commitment to diversity, equity, and inclusion (DEI). Georgia Tech has policies to promote a healthy work-life balance.

Please submit your application through this link:

https://isye.gatech.edu/about/employment-opportunities/faculty-positions
Applicants should submit: (1) a letter of application; (2) curriculum vitae; (3) a statement of research interests; (4) a statement of education interests addressing teaching interests as well as their advising/mentoring philosophy; (5) a statement describing their understanding of, prior engagement in, and plans for future activities to support DEI; and (6) the names and contact information for at least three references. Application materials should be submitted below. Requests for information may be directed to the search committee co-chairs, Drs. Alejandro Toriello and Yao Xie (facultysearch@isye.gatech.edu). Applications will be considered beginning September 15, 2021, but the search will continue until the positions are filled. A Ph.D. or equivalent qualification is required by the start of the appointment, and a background check must be completed prior to employment.

Diversity is one of Georgia Tech’s greatest strengths and one of the major priorities identified in our strategic plan. Georgia Tech is an equal education/employment opportunity institution dedicated to building a diverse community. We believe that diversity includes the individual differences among people from differing social, racial, or ethnic backgrounds, gender, sexual orientations, gender identities and expressions, economic circumstances, personal characteristics, philosophical outlooks, life experiences, perspectives, beliefs, expectations, physical abilities, and aspirations. Each of these characteristics, both singularly and in combination, contributes to the richness of the Georgia Tech community.

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The Department of Industrial and Systems Engineering at Mississippi State University has one open faculty position.

The Department of Industrial and Systems Engineering at Mississippi State University is seeking applicants for an open tenure-track faculty position at the Assistant, Associate, or Full Professor level. An endowed faculty position will be considered for outstanding applicants at the Full Professor level. While the department is primarily interested in candidates with backgrounds in engineering management, operations research, and data science/analytics or those candidates with strong experience in the automotive field, qualified candidates in all areas of industrial and systems engineering are encouraged to apply. The anticipated start date is August 16, 2022.

A Ph.D. in Industrial Engineering, or a closely related field, is required. Applicants must have an established or have demonstrated the ability to develop an externally-sponsored research program with results published in refereed journals and be able to teach undergraduate and graduate level courses, advise undergraduate and graduate students, and provide service to the university and profession.

Mississippi State University is ranked as one of the top 100 research institutions in the United States and is designated by the Carnegie Institute as a very high research activity doctoral-granting institution in the United States. The Department of Industrial and Systems Engineering is one of eight academic departments in the College and offers an ABET-accredited bachelor’s degree program in industrial engineering as well as master’s and doctoral degrees. ISE is currently ranked 21st in the NSF Research Expenditure Rankings based on expenditures for 2020. To learn more about the department, please visit our website at www.isc.mstate.edu.

Applicants must apply on-line at www.jobs.msstate.edu by completing the Personal Data Information form and attaching a
cover letter, curriculum vitae, and a document listing the names, addresses, and telephone numbers of three references. Search for PARF# 502228. The review of applicants will begin October 15, 2021 and continue until the positions are filled.

Mississippi State University is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, ethnicity, sex (including pregnancy and gender identity), national origin, disability status, age, sexual orientation, genetic information, protected veteran status, or any other characteristic protected by law. We always welcome nominations and applications from women, members of any minority group, and others who share our passion for building a diverse community that reflects the diversity in our student population.

Assistant Professor position in Data Sciences and Artificial Intelligence at Mines Saint-Etienne (Provence, France).

An Assistant Professor position in Data Sciences and Artificial Intelligence for manufacturing and logistics is open at Mines Saint-Etienne (Campus of Gardanne, near Aix-en-Provence in France), Department of Manufacturing Sciences and Logistics, which is attached to UMR CNRS 6158 LIMOS.

A permanent position of Associate Professor should open next year, and the recruited Assistant Professor will be well positioned to get the permanent position.

For any information, contact Nabil Absi (absi@emse.fr) or Stéphane Dauzère-Pérès (Dauzere-Peres@emse.fr).

Assistant Professor of Industrial Engineering at the University of Arkansas: Position Announcement

Position Description: The Department of Industrial Engineering at the University of Arkansas invites applications for a tenure-track Assistant Professor of Industrial Engineering position with an anticipated start date of August 2022. We seek individuals whose research and teaching interests are in all areas of data analytics that align with the department’s emphasis in the applications of quantitative modeling and analysis. Examples include, but are not limited to, quality and reliability engineering, logistics and distribution, healthcare systems, machine learning, manufacturing systems, computing and cyber-physical systems. We seek individuals who can contribute to modernizing undergraduate and graduate curricula, growing the graduate program, and the university’s new cross-college, interdisciplinary Institute for Integrative and Innovative Research (I3R). I3R was established via a $194.7 million grant from the Walton Family Charitable Support Foundation to grow cross-disciplinary research capability, expand the scope of discoveries, and increase commercialization of research.

Qualifications: Applicants should have a PhD (or earned by August 2022) in industrial engineering, operations research, statistics, data science, computer science, or another closely related field and have excellent communication skills. Applicants should demonstrate potential for high-quality research, securing competitive research funding, generating high-quality publications, teaching a variety of undergraduate and graduate courses, and providing appropriate service to the department, university, and profession. Successful candidates will demonstrate collaborative and interdisciplinary

A permanent position of Assistant Professor should open next year, and the recruited Assistant Professor will be well positioned to get the permanent position.

For any information, contact Nabil Absi (absi@emse.fr) or Stéphane Dauzère-Pérès (Dauzere-Peres@emse.fr).
synergy with existing research strengths on-campus and a commitment to promoting diversity, equity, and inclusion.

Diversity and Inclusion Statement: The College of Engineering is dedicated to building and supporting an inclusive culture with a diverse and pluralistic faculty, staff, and administration. The College encourages applications from all qualified candidates, especially individuals who contribute to diversity of our campus community and welcomes applications without regard to race/color, sex, gender, pregnancy, age, national origin, disability, religion, marital or parental status, protected veteran or military status, genetic information, LGBTQIA+, or any other characteristic protected under applicable federal or state law. The College invites applicants with career interruptions to share the related circumstances and explain how these interruptions have impacted their career path.

How to Apply: Applicants are asked to submit a single PDF file that includes (i) a letter of interest, (ii) a curriculum vita, (iii) research and teaching statements, (iv) a diversity statement that includes their understanding of, prior and/or ongoing experiences engaging with individuals from a broad range of backgrounds, and plans to attract, teach, and mentor a diverse group of students, and (v) names and contact information of three professional references. To ensure full consideration, application materials should be submitted online by November 15th, 2021, at https://bit.ly/ua_assistant_professor. Applications submitted after that date will be reviewed until the position is filled. Please direct any questions to iresearch@uark.edu.

Instructor or Teaching Assistant Professor, Department of Industrial Engineering, the University of Arkansas: Position Announcement

Position Description: The Department of Industrial Engineering at the University of Arkansas invites applications for an open rank teaching position. The position is a non-tenure track appointment as either Instructor or Teaching Assistant Professor, with title contingent on the qualifications of the candidate. The responsibilities of the position include teaching undergraduate industrial engineering courses, advising undergraduate industrial engineering students and participating in a level of scholarship consistent with the appointment. The anticipated start date of the position is either January or August 2022.

Qualifications: Applicants should have a graduate degree (or earned prior to start date) in industrial engineering, systems engineering, engineering management, operations research or other closely related field and possess excellent oral and written communication skills. To be eligible for appointment as Teaching Assistant Professor, the candidate must hold a Ph.D. at the time of appointment. Applicants should demonstrate potential for teaching excellence at the undergraduate level and the ability to provide student academic advising and other appropriate service to the department, university, and the profession.

Diversity and Inclusion Statement: The College of Engineering is dedicated to building and supporting an inclusive culture with a diverse and pluralistic faculty, staff, and administration. The College encourages applications from all qualified candidates, especially individuals who contribute to diversity of our campus community and welcomes applications without regard to race/color, sex, gender, pregnancy, age, national origin, disability, religion, marital or parental status, protected veteran or military status, genetic information, LGBTQIA+, or any other characteristic protected under applicable federal or state law. The College invites
applicants with career interruptions to share the related circumstances and explain how these interruptions have impacted their career path.

*Application Instructions:* Applicants are asked to provide (i) a letter of interest, (ii) a curriculum vita, (iii) a one-page teaching statement addressing their teaching and advising/mentoring philosophy, (iv) a teaching portfolio and summary of teaching evaluations, if available, (v) a one-page diversity statement that includes any previous and/or ongoing experiences engaging with individuals from a broad range of backgrounds and plans to attract, teach, and mentor a diverse group of students, and (vi) names and contact information of three professional references. To ensure full consideration, application materials should be submitted online by November 1, 2021 at [https://bit.ly/ua_instructor_teaching_professor](https://bit.ly/ua_instructor_teaching_professor). Applications submitted after that date will be reviewed until the position is filled. Please direct any questions to iehire@uark.edu.

*About the University of Arkansas:* The University of Arkansas is a Carnegie R1 research institution, located in one of the fastest growing regions in the U.S. With a population of over 525,000, Northwest Arkansas is home to the corporate headquarters of Fortune 500 companies Walmart, Tyson Foods, and J.B. Hunt Transport Services. U.S. News recently ranked Fayetteville as the #4 best place to live in the United States based on quality of life, job market and value of living. Information about the area can be found at [https://findingnwa.com/](https://findingnwa.com/).

The College of Engineering supports over 130 full-time faculty to mentor 3,200 undergraduate and 1,000 graduate students, awarding Bachelor of Science degrees in nine disciplines, Master of Science degrees in fifteen disciplines, and a Doctor of Philosophy in Engineering across nine concentrations. The College of Engineering’s annual $25M-plus research portfolio boasts multiple centers and core facilities and includes multi-disciplinary partnerships across campus.

*Equal Employment Opportunity Statement:* The University of Arkansas is an equal opportunity, affirmative action institution. The university welcomes applications without regard to age, race, gender (including pregnancy), national origin, disability, religion, marital or parental status, protected veteran status, military service, genetic information, sexual orientation or gender identity. Persons must have proof of legal authority to work in the United States on the first day of employment. All applicant information is subject to public disclosure under the Arkansas Freedom of Information Act.

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*Faculty Position in the Grado Department of Industrial and Systems Engineering, Virginia Tech – Assistant/Associate Professor, Stochastic Operations Research-Health Systems.*

The Grado Department of Industrial and Systems Engineering (ISE) at Virginia Tech invites applications for a tenured/tenure-track faculty position at the rank of Assistant or Associate Professor, effective August 2022. We seek outstanding candidates for Stochastic Operations Research with a focus on Health Systems, with areas of interest including, but not limited to, health policy, healthcare analytics, healthcare operations, and/or medical decision making. We are seeking candidates motivated to contribute to a collegial, interdisciplinary community with a strong tradition of both fundamental and applied research, high-quality teaching, and mentoring.

The ISE Department has 34 tenured/tenure-track faculty, with an additional seven non-tenure-track instructional and research faculty.
Four faculty are recent early investigator recipients, and numerous other faculties have received international or national recognition. Academic programs and research in the department encompass Human Factors and Ergonomics, Manufacturing, Management and Systems Engineering, and Operations Research. Candidates will thus have the opportunity to work with a broad range of departmental faculty, as well as with faculty in many other colleges, centers, and institutes at Virginia Tech. The department is home to approximately 620 undergraduate students, 80 master’s students, and 110 doctoral students. The undergraduate and graduate ISE programs are currently ranked third and eighth, respectively, by U.S. News & World Report. Additional information is available at: www.ise.vt.edu.

Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world. Building on its motto of Ut Prosim (that I may serve), Virginia Tech is dedicated to InclusiveVT—serving in the spirit of community, diversity, and excellence. Virginia Tech actively seeks a broad spectrum of candidates to join our community in preparing leaders for the world. The College of Engineering undergraduate program ranks 13th and graduate program ranks 31st among all U.S. engineering schools (USN&WR). The mission of the College of Engineering is to educate and inspire our students to be critical thinkers, innovators and leaders.

Our core values are inclusiveness, excellence, integrity, perseverance and stewardship. Virginia Tech’s main campus is located in Blacksburg, VA, in an area consistently ranked among the country’s best places to live. In addition, our facilities in the Washington, D.C., area offer unique proximity to government and industry partners and is also expanding rapidly, with Virginia Tech's exciting new Innovation Campus in Alexandria, VA, slated to open in 2024.

Candidates are expected to lead innovative scholarship and research, develop and sustain an externally-funded research program, teach and mentor undergraduate and graduate students, and serve the university and the profession. The position requires a Ph.D. in industrial and systems engineering, operations research, or a closely related field. Successful candidates will have a record of academic accomplishments and a demonstrated ability to work collaboratively, commitment to interdisciplinary research, and a willingness to expand disciplinary boundaries to address complex technical and societal challenges. The successful candidate will be required to have a criminal conviction check as well as documentation of COVID-19 vaccination or receive approval from the university for a vaccination exemption due to a medical condition or sincerely held religious belief.

Applicants must apply online at https://jobs.vt.edu (posting number 517936). Application materials include a cover letter, CV, three separate statements limited to three pages each (teaching interests and philosophy, research interests, and contributions to advancing diversity, equity, and inclusion), up to three relevant research publications, and contact information for at least three professional references. Review of applications will commence December 6, 2021 and continue until the position is filled. Questions regarding the positions should be directed to Dr. Kwok-Leung Tsui (ktsui@vt.edu, 540-231-9088). For assistance submitting the application, please contact ise-search@vt.edu.

The department fully embraces Virginia Tech’s commitment to increase faculty, staff, and student diversity; to ensure a welcoming,
affirming, safe, and accessible campus climate; to advance our research, teaching, and service mission through inclusive excellence; and to promote sustainable transformation through institutionalized structures. Virginia Tech does not discriminate against employees, students, or applicants on the basis of age, color, disability, sex (including pregnancy), gender, gender identity, gender expression, genetic information, national origin, political affiliation, race, religion, sexual orientation, or veteran status, or otherwise discriminate against employees or applicants who inquire about, discuss, or disclose their compensation or the compensation of other employees or applicants, or on any other basis protected by law. If you are an individual with a disability and need an accommodation, please contact Ms. Heather Parrish (parrish1@vt.edu, 540-231-9079).

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