

# The 2021 INFORMS Workshop on Data Science

*Hosted by The INFORMS College on Artificial Intelligence*

**Conference date: Saturday October 23rd, 2021**

Due to the ongoing COVID-19 pandemic, the 2021 Data Science workshop will be held **ONLINE**. More information will be posted on <http://2021.dsconf.cc/> once available.

The INFORMS Workshop on Data Science is a premier research conference dedicated to developing data science theories, methods, and algorithms to solve challenging problems and benefit business and society at large. The workshop invites innovative data science research contributions that address business and societal challenges from the lens of statistical learning, data mining, machine learning, deep learning, reinforcement learning, and artificial intelligence. The workshop welcomes original research addressing non-trivial data analytical challenges and problems in marketing, finance, and supply chain, healthcare, energy, cybersecurity, social network services, privacy, credibility, etc. Contributions on novel methods may be motivated by insightful observations on the limitations of existing data science methods to address practical challenges, or by studying entirely new data science problems. Research contributions on theoretical and methodological foundations of data science, such as optimization for machine learning and new algorithms for data mining, are also welcomed.

## **Research Contributions May Include:**

- Models for data science and predictive analytics
- Performance measures in data science with important practical implications
- Computational methods for big data, text mining, and natural language processing
- Innovative methods for social network analytics on individuals and firms
- Data acquisition, cleaning, integration, and best practices
- Data-driven methods for cybersecurity and data privacy problems
- Prediction of rare events, anomaly detection, and fraud detection
- Methods for induction and inference with missing values
- Data-driven methods for effective risk management
- Data science for healthcare: chronic disease management, preventative care, etc.
- Data science for industrial applications: energy, education, finance, supply chain, etc.
- Large-scale recommendation systems and social media systems
- Visual analytics for business data in image and video formats
- Mobile analytics and spatio-temporal data mining
- Experiences with big data project deployments
- Machine learning, deep learning, reinforcement learning, and AI for business applications

## Important Dates:

Paper submission Open: May 4, 2021

Paper submission Deadline: July 15, 2021

Notification of Acceptance: August 25, 2021 (tentative)

## Information for Authors:

- Maximum of 10 pages including tables and figures. References do not count towards the page limit. Use single-spaced text with 12-point font and one-inch margins on four sides, printable on 8.5 x 11-inch paper.
- Blind submissions
- **INFORMS or Workshop on Data Science does not take ownership of paper copyrights.**
- Authors of accepted papers might have an opportunity for fast-track submission to IJDS.

## Best Paper Awards:

The INFORMS College on Artificial Intelligence who hosts the Workshop on Data Science will be sponsoring the **best paper** and the **best student paper** awards. To be considered for the best student paper award, please confirm in the submission portal that a student is the main contributor when submitting your paper.

## Organizing Committee:

### Honorary Chairs

Olivia Sheng, University of Utah

Alexander S. Tuzhilin, New York University

### Conference Chairs

Gautam Pant, University of Iowa, [gautam-pant@uiowa.edu](mailto:gautam-pant@uiowa.edu)

Wenjun Zhou, University of Tennessee, [wzhou4@utk.edu](mailto:wzhou4@utk.edu)

Shawn Mankad, Cornell University, [spm263@cornell.edu](mailto:spm263@cornell.edu)

### Program Chairs

Yong Ge, University of Arizona, [yongge@arizona.edu](mailto:yongge@arizona.edu)

Gene Moo Lee, University of British Columbia, [gene.lee@sauder.ubc.ca](mailto:gene.lee@sauder.ubc.ca)

Jingjing Zhang, Indiana University, [jjzhang@indiana.edu](mailto:jjzhang@indiana.edu)

### Publicity Chairs

Jessica Clark, University of Maryland, [jmclark@umd.edu](mailto:jmclark@umd.edu)

Tomer Geva, Tel Aviv University, [tgeva@tau.ac.il](mailto:tgeva@tau.ac.il)

Dirk Neumann, University of Freiburg, [dirk.neumann@is.uni-freiburg.de](mailto:dirk.neumann@is.uni-freiburg.de)

Paul Pavlou, University of Houston, [pavlou@bauer.uh.edu](mailto:pavlou@bauer.uh.edu)

Junjie Wu, Beihang University, [wujj@buaa.edu.cn](mailto:wujj@buaa.edu.cn)

Finance Chair

Brent Kitchens, University of Virginia, [bm2a@comm.virginia.edu](mailto:bm2a@comm.virginia.edu)

Webmaster

Kexin Yin, University of Delaware