

Call for Papers – *Risk Analysis*: Special issue on "Risk Analysis in the Digital Era"

Guest Editors: Jun Zhuang (jzhuang@buffalo.edu; University at Buffalo) and Chen Wang (chenwang@tsinghua.edu.cn, Tsinghua University)

Area Editor: James H. Lambert (lambert@virginia.edu; University of Virginia)

The world is entering a digital era where people and systems leave digital footprints in websites, social media, cameras, sensor logs, and mobile devices. Manufacturing and operating systems collect streaming data through embedded sensors and the Internet of Things (IoT). Vehicles generate vast amounts of trajectory and sensor log data in both aviation and surface transportation.

Risks, whether from natural, technological, or adversarial hazards, arise from a variety of root causes including human behaviors. There are tremendous opportunities for risk analysis to embrace the integration with big data, natural language processing, computer vision, and machine learning methods in the digital era. For example, real-time analytics of human behaviors could help mitigate homeland-security risk. Transportation and human data could also be utilized in humanitarian logistics.

This special issue seeks submissions that conduct cutting-edge research on the rich possibilities of harnessing high-volume, high-dimensional, multi-source, and/or multi-modal data to give insights for risk assessment, risk communication, and risk management. We also welcome perspective papers discussing the scope and limitations of big data risk analytics, including managing extreme events, causality vs. correlation, and privacy, legal and ethical issues.

Key areas of focus include, but are not limited to:

- Adversarial behavior analytics in homeland security
- Data-driven food safety analytics
- Aviation risk analytics with flight recorded data
- Risk analytics in humanitarian logistics
- Big data-driven optimization models
- Predictive analytics for risk assessment and risk management
- Disaster management with big data
- Blockchain risk analytics
- Social media and risk analysis
- Cyber security and risk analysis
- Artificial intelligence and risk analysis
- Machine learning and risk analysis
- Virtual reality and risk analysis
- Internet of things and risk analysis

Paper Submission:

Submitted articles must not have been previously published or currently submitted for journal publication elsewhere. Authors are responsible for understanding and adhering to the submission guidelines, which could be accessed at: <http://sra.org/sra-journal>, or <http://manuscriptcentral.com/riskanalysis>. Each paper will go through a rigorous review process. The authors are strongly recommended to contact the guest editors before submitting their manuscript. Please mention the special issue on "Risk Analysis in the Digital Era" on the cover letter during the submission process.

Important Dates:

- Submission Deadline: October 1st, 2019
- First-Round Reviews (target): February 1st, 2020
- Special Issue Published: Early 2021