Call for Papers

Annals of Operations Research

Special Issue: "Machine Learning Models for Early Misinformation and Disinformation Detection Systems"

The ***Annals of Operations Research*** is currently accepting submissions for a special issue dedicated to "**Machine Learning Models for Early Misinformation and Disinformation Detection Systems.**"

The widespread availability of digital platforms and social media channels has made it incredibility easy for disinformation to be disseminated rapidly, reaching millions of people within minutes. However, the spread of misinformation or disinformation can often mislead people, leading them to make decisions based on false, or misleading information. The timely detection of such misleading events has become a critical research area with implications for journalism, social media, online platforms, and beyond. Operations Research (OR) and Machine Learning (ML) methods have shown promise in addressing these challenges by enabling the development of advanced algorithms, models, and systems for detecting and mitigating the spread of false information.

OR and ML fields are connected through their shared goal of optimization and data-driven decision-making. The Special Issue aims to bring together cutting-edge research and advancements in the field of detecting disinformation using OR and ML techniques. This issue will serve as a platform for researchers, academicians, and industry experts to share their original contributions, insights, methodologies, and innovative algorithmsin developing cutting-edge models for identifying and mitigating disinformation.

The Special Issue invites original research articles, and application-oriented papers in the following (but not limited to) topics:

- Development of OR and ML-based models for disinformation detection
- Feature engineering and representation learning for disinformation detection
- Deep learning models development for rumour detection and propagation analysis
- Applications of natural language processing (NLP) and sentiment analysis in disinformation detection
- OR and ML techniques for assessing the credibility of information sources
- Early stress detection based on incomplete information
- Social network analysis to understand the dynamics of disinformation spread
- Social media analytics for monitoring and countering disinformation campaigns
- Identifying and countering algorithmic bias in disinformation detection systems
- Network analysis and graph-based algorithms to understand disinformation propagation.
- Case studies on real-world applications of OR and ML in predicting disinformation
- Real-world applications of disinformation detection models in information verification
- Explainable AI and interpretability in disinformation detection systems

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Submission Guidelines

- All manuscripts should be submitted through the Annals of Operations Research Journal online submission system. Submissions should follow the manuscript format guidelines for the *Annals of Operations Research* journal. All submissions will undergo a rigorous peer-review process to ensure the quality and relevance of the research. Manuscripts should not have been previously published or be under review in any other journal.

- Authors should select "*SI: ML Models for Early Misinformation and Disinformation Detection Systems*" as "Manuscript Type."

    - Paper Submission Deadline: 31 December 2024