Special Issue

Computational Methods and Machine Learning for Causal Inference

Message from the Guest Editor

Assessing causality is challenging in the natural and social sciences. Yet, in recent years, causal inference has become vital for empirical evaluation across several fields such as computer science, economics, epidemiology, medical studies, political science, and sociology. Analyzing causal relationships is also critical for artificial intelligence (AI), as causality is necessary for overcoming limitations of predictions and assessment of correlations by machine learning. To this end, the Special Issue pursues three goals. The first is to provide a comprehensive introduction to the computational implementation of different causal inference estimators from a historical perspective, where new estimators were developed to overcome the limitations of previous estimators. The second goal is to present original empirical research on computational causal inference and causal machine learning across a variety of fields. The third is to focus on advances in causal machine learning that address causal effect estimation for unstructured data, such as text and images.

Guest Editor

Prof. Dr. Bumba Mukherjee Department of Political Science, Pennsylvania State University, State College, PA 16802, USA

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

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