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CAUSAL DISCOVERY AND GRAPHICAL CAUSAL MODELS

Jonas Actor*[1] and Elise Walker[1] and Yue Yu[2]

[1]Sandia National Laboratories
[2]Lehigh University

MINISYMPOSIUM

With increasing prevalence of data-driven computational tools, novel methods for uncovering complex nonlinear relationships between otherwise-disparate data have achieved tremendous improvements on a range of tasks, including but not limited to problems in computational mechanics. However, measuring causality, and not merely correlation, among these relationships remains a difficult task: many theoretical, practical, and computational issues persist, particularly concerning graphical model recovery, causal attribution, confounding relationships, measurement error, causal time-series models, and complex casual mechanisms.

This minisymposium will convene world-class researchers in a forum to present advances in causal inference, causal discovery, and structured causal models, drawing upon expertise in machine learning, statistics, scientific computing, and specific domain applications.