

Accepted workshop papers are to be published in

Proceedings of Machine Learning Research (formerly JMLR Workshop and Conference Proceedings)

As a basic and effective tool for explanation, prediction and decision making, causal relationships have been utilized in almost all disciplines. Traditionally, causal relationships are identified by making use of interventions or randomized controlled experiments. However, conducting such experiments is often expensive or even impossible due to cost or ethical concerns. Therefore, there has been an increasing interest in discovering causal relationships based on observational data, and in the past few decades, significant contributions have been made to this field by computer scientists.

Inspired by such achievements and following the success of CD 2016 & 2017, CD 2018 continues to serve as a forum for researchers and practitioners in data mining and other disciplines to share their recent research in causal discovery in their respective fields and to explore the possibility of interdisciplinary collaborations in the study of causality. Based on the platform of KDD, this workshop is especially interested in attracting contributions that link data mining/machine learning research with causal discovery, and solutions to causal discovery in large scale data sets.

Topics of Interest

The workshop invites submissions on all topics of causal discovery, including but not limited to:

- Causal structure learning
- Local casual structure discovery
- Causal discovery in high-dimensional data
- Integration of experimental and observational data for causal discovery
- Real world applications of causal discovery (e.g. in bioinformatics)
- Applications of data mining approaches to causal discovery
- Assessment of causal discovery methods

Important Dates

- May 08, 2018: Paper submission deadline
- June 08, 2018: Notification of acceptance/rejection
- July 20, 2018: Camera-ready submission deadline for accepted papers
- August 20, 2018: Workshop date

Paper Submission and Publications

Papers submitted to this workshop must not be under review or accepted for publication elsewhere. All submitted papers will be reviewed and selected by the program committee on the basis of originality, technical quality, relevance to the workshop and presentation quality.

Papers must follow the <u>Instruction for Authors</u> of the *Journal of Machine Learning Research* (JMLR). All papers must be submitted via <u>the EasyChair System</u>. Within the submission system, please choose "CD 2018" for your submission.

Workshop Organizers

Thuc Le, University of South Australia Kun Zhang, Carnegie Mellon University Emre Kıcıman, Microsoft Research Aapo Hyvärinen, University College London Lin Liu, University of South Australia

Further Information

Please visit workshop website: http://nugget.unisa.edu.au/CD2018/