

Preface: The 2020 ACM SIGKDD Workshop on Causal Discovery

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The year of 2020 has been unprecedented with the COVID-19 pandemic disrupting our life. Despite such a hard situation, the 2020 ACM SIGKDD workshop on Causal Discovery (CD 2020) is still happening to continue our success in the last four years. CD 2020 aims at bringing together researchers and practitioners interested in causal discovery from various disciplines, to communicate their new ideas, algorithms, and novel applications of causal discovery methods.

Discovering causal relationships is the ultimate goal of many scientific explorations. However, it is not feasible to conduct randomized controlled trials in most cases. Discovering causal relationships in large databases of observational data is therefore very important, but it is also a challenging problem. 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. We have seen a diverse group of audiences in our workshop in the last few years. This year, the workshop is held

virtually in conjunction with the 2020 International Conference on Knowledge Discovery and Data Mining (KDD 2020), 23-27 August, 2020, which provides the workshop with the opportunity to attract contributions from the data mining community especially.

The workshop has received 8 high-quality submissions. After a careful review process with each paper being reviewed by 4-5 experts, four papers have been selected for publishing in the *Proceedings of Machine Learning Research*, Volume 127, 2020 and presenting at CD 2020. The workshop features three keynote speeches by Professor Clark Glymour from Carnegie Mellon University, Professor Ilya Shpitser from Johns Hopkins University, and Professor Elias Bareinboim from Columbia University.

We would like to thank all the people who have contributed to the workshop. In particular, we thank all authors who have submitted their papers to CD 2020 and the PC members for their timely and high-quality reviews. It would not be possible for the workshop to succeed without your involvement. We are grateful to KDD 2020 for their support, especially to the workshop chairs for their help and cooperation. We also thank the Series Editors at *Proceedings of Machine Learning Research*, Professor Neil Lawrence and Dr Mark Reid for their help in publishing the workshop proceedings.

Finally, we would like to thank you, the participants of the workshop and the readers of the proceedings. We hope you enjoy the workshop and the papers.

Workshop Organisation

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Emre Kiciman, *Microsoft Research*

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