

# Publications

Dominik Janzing

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## Co-authored book

- [1] J. Peters, D. Janzing, and B. Schölkopf. *Elements of Causal Inference – Foundations and Learning Algorithms*. MIT Press, 2017.

## Articles in peer-reviewed conference proceedings

- [1] Bijan Mazaheri, Atalanti Mastakouri, Dominik Janzing, and Mila Hardt. Causal information splitting: Engineering proxy features for robustness to distribution shifts. In *Proceedings of UAI 2023 (to appear)*, 2023.
- [2] Luigi Gresele, Julius Von Kügelgen, Jonas Kübler, Elke Kirschbaum, Bernhard Schölkopf, and Dominik Janzing. Causal inference through the structural causal marginal problem. In Kamalika Chaudhuri, Stefanie Jegelka, Le Song, Csaba Szepesvari, Gang Niu, and Sivan Sabato, editors, *Proceedings of the 39th International Conference on Machine Learning*, volume 162 of *Proceedings of Machine Learning Research*, pages 7793–7824. PMLR, 17–23 Jul 2022.
- [3] Yonghan Jung, Shiva Kasiviswanathan, Dominik Janzing, Patrick Blöbaum, and Bareinboim Elias. *do*-shapley: Towards causal interpretation of model prediction. In *ICML 2022*.
- [4] Kailash Budhathoki, Lenon Minorics, Patrick Bloebaum, and Dominik Janzing. Causal structure-based root cause analysis of outliers. In Kamalika Chaudhuri, Stefanie Jegelka, Le Song, Csaba Szepesvari, Gang Niu, and Sivan Sabato, editors, *Proceedings of the 39th International Conference on Machine Learning*, volume 162 of *Proceedings of Machine Learning Research*, pages 2357–2369. PMLR, 17–23 Jul 2022.
- [5] Sergio Hernan Garrido Mejia, Elke Kirschbaum, and Dominik Janzing. Obtaining causal information by merging datasets with maxent. In *Proceedings of the Twenty Fifth International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2022.

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- [7] Leena Chennuru Vankadara, Phillip Michael Faller, Lenon Minorics, Debarghya Ghoshdastidar, and Dominik Janzing. Causal forecasting: Generalization bounds for autoregressive models. In *UAI 2022*.
- [8] Osama Makansi, Julius von Kügelgen, Francesco Locatello, Dominik Janzing Peter Gehler, Bernhard Schölkopf, and Thomas Brox. You mostly walk alone: Analyzing feature attribution in trajectory prediction. In *ICLR 2022*, 2022.
- [9] Lenon Minorics, Ali Caner Türkmen, Patrick Bloebaum, David Kernert, Laurent Callot, and Dominik Janzing. Testing for granger non-causality in panels with cross-sectional dependencies. In *Proceedings of the Twenty Fifth International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2022.
- [10] Atalanti A Mastakouri, Bernhard Schölkopf, and Dominik Janzing. Necessary and sufficient conditions for causal feature selection in time series with latent common causes. In *International Conference on Machine Learning (ICML)*, pages 7502–7511. PMLR, 2021.
- [11] Michel Besserve, Naji Shajarisales, Dominik Janzing, and Bernhard Schölkopf. Identifying cause versus effect in time series via spectral independence: theoretical foundations. In *Proceedings of First Conference on Causal Learning and Reasoning (CLear 2022)*, 2022.
- [12] K. Budhathoki, D. Janzing, P. Blöbaum, and H. Ng. Why did the distribution change? In *Proceedings of 24th International Conference on Artificial Intelligence and Statistics (AISTATS)*, page to appear. Journal Machine Learning Research (JMLR), 2021.
- [13] D. Janzing. Causal regularization. In H. Wallach, H. Larochelle, A. Beygelzimer, F. d'Alché-Buc, E. Fox, and R. Garnett, editors, *Advances in Neural Information Processing Systems 32*, pages 12704–12714. Curran Associates, Inc., 2019.
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## Articles in books

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- [2] D. Janzing, B. Steudel, N. Shajarisales, and B. Schölkopf. Justifying information-geometric causal inference. In V. Vovk, Papadopolous H., and A. Gammerman, editors, *Measures of Complexity*, Festschrift for Alexey Chervonencis, pages 253–265. Springer Verlag, Heidelberg, 2015.
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## Popular scientific article

- [1] D. Janzing. Mit Quanten ist zu rechnen. *Physik Journal*, pages 25–28, November 2005.

## Co-edited books and journals

- [1] I. Guyon, D. Janzing, and B. Schölkopf, editors. *Proceedings of the NIPS 2008 workshop “Causality: Objectives and Assessment”*, *Journal for Machine Learning Research, Workshop & Conference Proceedings*, 2010.
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## Preprints

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## Theses (Habilitation / Doktor / Diplom)

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