

Causality

Course Overview

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Course overview

- Session 1** Wednesday 7 September - course (E. Gaussier)
Introduction to causal graphical models
- Session 2** Wednesday 14 September - course + lab (E. Devijver)
Structural equation models, structural causal models
Lab on graphs
- Session 3** Wednesday 21 September - course (C. Assaad)
Causal discovery: constraint-based methods
- Session 4** Wednesday 28 September - course (C. Assaad, E. Gaussier)
Causal discovery: noise-based, score-based and other methods
- Session 5** Wednesday 5 October - lab + course (C. Assaad)
Lab on PC algorithm (0.25)
Backdoor and frontdoor criteria

Course overview

Session 6 Wednesday 12 October - course (E. Devijver)
Do-calculus and estimation

Session 7 Wednesday 19 October - course (E. Devijver)
Counterfactual reasoning

Session 8 Wednesday 26 October - lab + course (E. Gaussier)
Lab on Simpson's paradox (0.25) Causality and machine learning

Session 9 Wednesday 9 November - final exam
Presentation of articles (0.5)

Elements (labs + final exam) in orange are graded (the coefficient is given in parentheses)