Towards causal inference

Antal Péter

ComBine Lab

Artificial Intelligence group

Department of Measurement and Information Systems



Exercise

- Independence models of simple and general probabilistic graphical models
- Graphical representations of independences
 - Non-structural (parametric) independencies
 - Directed-separation
 - Separation in moral graphs
- Observational equivalence of causal models
 - Essential graphs, compelled edges
- Markov-blankets
 - Minimality: Markov-boundary
 - For multiple targets
- Construction of causal Bayesian networks
- Causal inference
 - do-operator
 - do-calculus
 - back-door criterion
- Counterfactual inference