

# appendix

Daniel Saggau

5/3/2021

Table 1: Pearls Hierachy of Causation (2009)

| Method                         | Action          | Example                          | ML Method                                    |
|--------------------------------|-----------------|----------------------------------|--|
| Prediction $P(a b)$            | Co-occurrence   | What happened. . .               | Supervised/Unsupervised                      |
| Intervention $P(a do(b), c)$   | Do-manipulation | What happens if . . .            | Reinforcement Learning                       |
| Counterfactual $P(a_b a', b')$ | Hypotheticals   | What would have happened if. . . | Reinforcement Learning /<br>Interpretable ML |