Bayesian Inference

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1 Graph theory

1.1 Basic definitions

- definitions
- triangulation

1.2 Probabilistic graphs

Directed acyclic graphs

- interpretation
- not unique (bayes thm)
- plate noteation
- model building
- conditional independence

Markov Networks

- interpretation
- conditional independence
- Moralization

1.3 Inference on Probabilistic graphs

Junction tree

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References

[1] David Barber. *Bayesian Reasoning and Machine Learning.* Cambridge University Press, New York, NY, USA, 2012.

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[3] Mark J. Schervish. *Theory of statistics.* Springer series in statistics. Springer, New York, Berlin, Heidelberg, 1995. Corrected second printing : 1997.