(Metro)

unnormalized
density

Discussion

- Introduced Metro, a universal non-parametric knockoff sampler, requiring only the ability to evaluate X's unnormalized density.

- Showed Metro is computationally efficient with graphical structure in many settings.

- Connected knockoff sampling and time-reversible Markov chains and provide a set of proposal distributions that work well empirically (*you could make great contribution as expert in computational statistics!*).

- Offered theoretical explanation on why knockoff sampling is not practically possible without some assumptions on the distribution and thus provided guidance on future research.

Current Knockoff Factory

Old

Knockoff

Factory

Gaussian

discrete
Markov chains

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