

8 Conclusions

We have developed memoized online variational inference algorithms for two nonparametric models: the HDP-HMM and HDP-aMMSB. We have shown their ability to recover structure in a wide variety of applications, even when the dimension of this structure is vague or unknown prior to inference. In the future, we hope to further improve our variational algorithms by adapting the work of [11], which varies the truncation level as inference progresses.

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