

Neural Approximate Sufficient Statistics

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Abstract

My talk will first review the concept of sufficient statistics and then explain that we can learn them by learning mutual information maximizing representations. I will then explain how we used the learned statistics to boost the performance of both classical and recent methods for Bayesian parameter inference when the likelihood is intractable but sampling from the model is possible.

References

- [1] Y. Chen, D. Zhang, M. Gutmann, A. Courville, Z. Zhu. [Neural Approximate Sufficient Statistics for Implicit Models](#), International Conference on Learning Representations (ICLR) 2021.